

Planning Commission Staff Report

Meeting Date: August 12, 2019

From: Andrew Stanislav, Planner *AS*

Location: A 4.76 acre tract of land located on the south side of Old Clarkson Road approximately 900 feet from its intersection with Baxter Road

Petition: **P.Z. 07-2019 15750 Old Clarkson Rd (Kumara S. Vadivelu)**: A request for a zoning map amendment from the “E-1/2AC” Estate Half Acre District to a “PUD” Planned Unit Development for a 4.76 acre tract of land located on the south side of Old Clarkson Road approximately 900 feet from its intersection with Baxter Road (19S130015).

SUMMARY

Kumara S. Vadivelu of Azack Construction has submitted a request for a zoning map amendment from “E-1/2AC” Estate Half Acre District to a “PUD” Planned Unit Development as part of a two-step zoning process for a 4.76 acre tract of land located on the south side of Old Clarkson Road approximately 900 feet from its intersection with Baxter Road.

The first step in the process is to request a change of zoning to a conventional residential district in order to establish the development density that is being requested in conjunction with the “PUD” petition. In order to satisfy this first step, the Petitioner amended petition P.Z. 11-2018 to request a change of zoning to “E-1/2AC” Estate District concurrently with the “PUD” request.

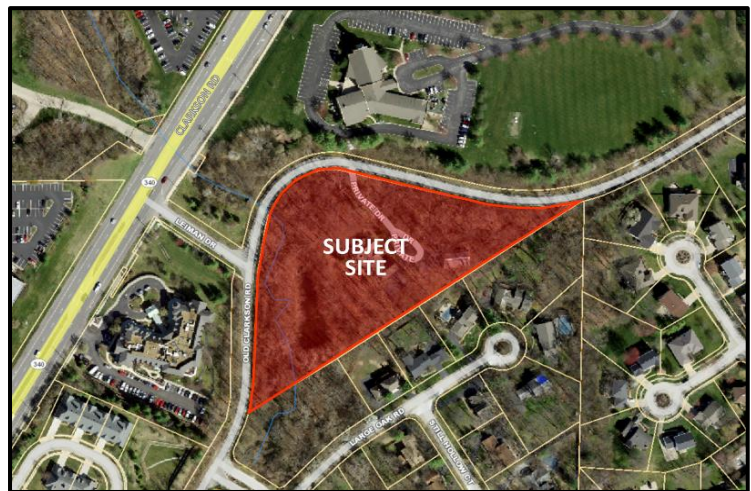


Figure 1: Subject site aerial image

A Public Hearing was held on June 12, 2019 for the “PUD” request, and the applicant has since made revisions in order to comply with requirements of the Unified Development Code (UDC).

HISTORY OF SUBJECT SITE

The subject site was zoned “NU” Non-Urban District by St. Louis County prior to the City’s incorporation. According to St. Louis County’s records, the existing single-family home on the subject site was built in 1983.

A petition was submitted in October 2018 (P.Z. 11-2018) requesting a change of zoning from the “NU” Non-Urban District to the “R-2” Residence (15,000 sq. ft.) District, and a Public Hearing was held for this on November 14, 2018. Following this hearing, the petitioner has actively pursued the project by contacting external agencies for comments as well as meeting with nearby residents of Old Clarkson Forest. On April 25, 2019, the petitioner submitted an amendment to P.Z. 11-2018 to request a change of zoning from the “NU” District to the “E-1/2AC” Estate Half Acre District in lieu of the previously requested “R-2” Residence District. This petition returned to the Planning Commission on May 13, 2019 in order to retain its “active” status in accordance with the Unified Development Code (UDC) and to provide a status update to the Commission. A new Public Hearing was also held on June 12, 2019 for the amended change of zoning request to the “E-1/2AC” District. Petition P.Z. 11-2018 remains active and serves as part of the two-step zoning process to obtain “PUD” Planned Unit Development zoning.

LAND USE AND ZONING OF SURROUNDING PROPERTIES

The land use and zoning for the properties surrounding this parcel are as follows:

Direction	Zoning	Land Use
North	“R-6A” Residence (4,000 square feet) District	Place of worship
East	“R-1A” Residence District	Single-family dwellings
South	“R-1A” Residence District	Single-family dwellings
West	“R-6” Residence (2,000 square feet) District	Senior living facility

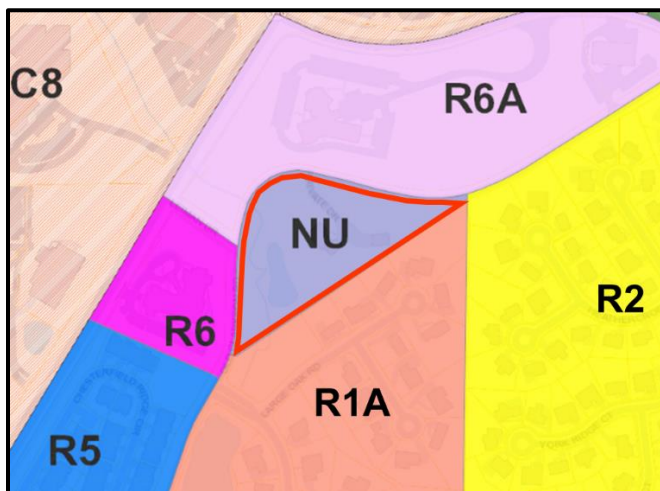


Figure 2: Zoning Map

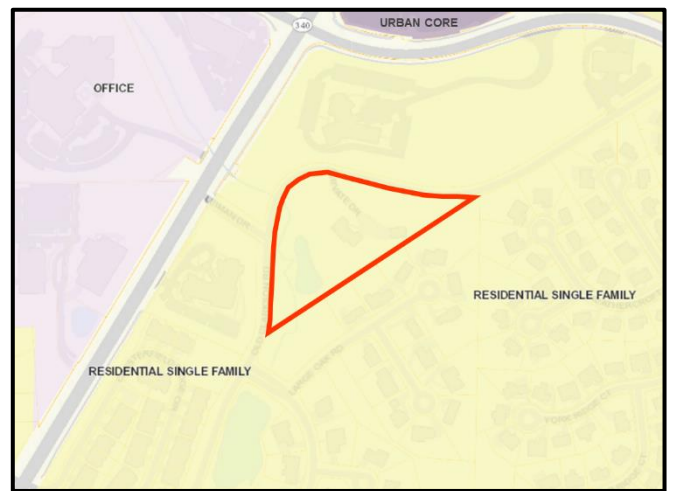


Figure 3: Future Land Use Plan

“PUD” DISTRICT REGULATIONS

The Unified Development Code Section 31-03-04.K states that “the purpose of the PUD District is to encourage flexibility in the density requirements and development standards of the zoning ordinance that

will result in exceptional design, character, and quality of new homogenous and mixed use developments; to promote the most appropriate use of land; to facilitate the provision of streets and utilities; and to preserve the natural and scenic features and open space.”

The Unified Development Code requires that any zoning petition requesting a zoning map amendment to the “PUD” district meet four (4) **General Requirements** in order to fulfill the basic application requirements for a “PUD.”

1. All property that is at least four (4) contiguous acres shall be eligible for the PUD District designation.

The subject site is one contiguous parcel of land comprising 4.76 acres and is eligible for the PUD District designation.

2. All property to be zoned PUD or an existing PUD Zoning District being amended shall be under single ownership, or if under multiple ownership, then by written consent of all owners who agree to be bound by the PUD District designation and regulations.

This petition is for a single parcel with one legal ownership/interest under contract.

3. The detailed standards set forth herein are minimum requirements, and it is the intent of this Section that the City of Chesterfield may impose conditions and safeguards in excess of, or in addition to, the specified minimal requirements. Satisfying the minimum standards set forth herein does not per se indicate that an application is entitled to a zoning change and notice is hereby given to that effect.

The petition meets the minimum requirements for a submittal and the Petitioner is aware that approval of an ordinance by City Council is required for a zoning map amendment. Additionally, the Petitioner is aware that requirements and conditions exceeding the minimum requirements may be imposed.

4. All utilities shall be installed underground.

All utilities will be installed underground if this request is approved.

Once it has been determined that these four General Requirements have been met, the application is accepted and the petition proceeds through the approval process.

Next, the project is reviewed against the **Minimum Design Requirements** for a PUD District. There are four (4) minimum design requirements that must be met in order for the project to qualify to ask for a change of zoning to the PUD District. These four (4) items are:

- 1. Proposal has to meet the maximum residential density determined by the existing zoning district or by submitting an application for a change of zoning from the "NU" Non-Urban District to a residential zoning district.**

Petition P.Z. 11-2018 satisfies the requirement for a change of zoning to a residential district that ultimately establishes the maximum development density.

- 2. Provision of thirty (30) percent Common Open Space to be displaced throughout the site and not concentrated in one (1) area or contain only that portion of the site that would be considered undevelopable.**

The most recent PUD proposal incorporates 1.47 acres of common open space, or approximately 30 percent of the total site. Proposed common ground surrounds the existing pond area and also extends to include a portion of the 30-foot wide landscape buffer strip along the Old Clarkson Forest subdivision as depicted on the Preliminary Plan.

- 3. Provision of perimeter buffer of at least thirty (30) feet in width.**

The Preliminary Plan includes a 30-foot wide perimeter landscape buffer, including the portion of the site along Old Clarkson Road and along the southern property line abutting the Old Clarkson Forest subdivision.

Most of the proposed buffers are depicted as part of the individual lots as opposed to dedicated common ground as seen in other PUDs previously approved in the City or as required for developments zoned as an "E" Estate District. A conceptual landscape plan is also included in this submittal depicting the location of required street trees along Old Clarkson Road as well as along the proposed private street.

- 4. Proposed project has to be consistent with the purposes and intent of the Comprehensive Plan and the City of Chesterfield Municipal Code.**

Information pertaining to the Comprehensive Plan land use designation is included in the Staff Report for P.Z. 11-2018 and the PUD purpose statement from the Unified Development Code is cited at the outset of this section.

In addition to these requirements above, the Unified Development Code lists twelve (12) **Design Features** suggested to be used by developers when applying for PUD District zoning. Section 31-03-04.K of the Unified Development Code also states the following: **"Satisfaction of all or any of these design features is not mandatory, but the approval of "PUD" zoning will be predicated on the use of the below list or any other design feature deemed desirable by the City of Chesterfield. Proposed inclusion of these design features within a "PUD" can increase the flexibility of design standards and the ability of the developer to negotiate the mitigation of other requirements."** Below is a list of the suggested Design Features from the City Code:

- Placement of structures on most suitable sites with consideration of maintaining existing site topography, soils, vegetation, slope, etc.;
- Preservation of natural and cultural areas, as well as the creation of open space through active and passive recreation areas to include greenways, landscape gardens, plazas, and walking and cycling trails that serve to connect significant areas and various land uses;
- Preservation of existing mature trees and trees deemed extraordinary by the City of Chesterfield Tree Specialist due to but not limited to the following: size, type, origin, grouping, or number of;
- Enhanced landscaping, deeper and opaque buffers, and increased planting along public right-of-ways, open space/recreational areas, and the overall perimeter to protect and ensure compatibility with adjacent land uses;
- Utilization of mixed use buildings;
- Utilization of Traditional Neighborhood Design (TND) techniques in the layout and spatial organization of the development;
- Structures designed and constructed of an architectural vernacular that exceeds the typical building design and materials within the City of Chesterfield;
- Segregation of vehicular traffic from pedestrian/bicycle circulation networks, and other traffic mitigation measures;
- Incorporation of Transit Oriented Development (TOD) or direct access to public transportation;
- Provision of affordable housing;
- Utilization of Leadership in Energy and Environmental Design (LEED) construction practices and development standards and the proposed LEED certification of buildings and grounds by the U.S. Green Building Council within the PUD; and
- Inclusion of community facilities and the access thereto.

These desirable design features are meant to guide developers and explain the high quality standards that the City would like to attain and that are utilized to consider requests for PUD Zoning. No single proposal is expected to include each of these items; however, some of these and similar concepts should be identifiable in any PUD petition. The applicant has noted that the proposed preservation of the existing pond area and trees above the 30 percent requirement are intended to preserve the character of the area.

ISSUES

A Public Hearing was held on June 12, 2019, and there were four speakers in opposition. Issues associated with the request were identified by the Planning Commission, and below is a summary of the issues mentioned as well as how the applicant has responded to each item:

1. **Tree Preservation and Mature Trees:** *preservation of mature trees on the subject property was expressed as a concern at the Public Hearing, specifically in regard to the possibility of preserving mature trees on each of the lots proposed. The condition ratings provided on the TSD were also questioned as it classifies two of the 350 trees identified as in good condition. Verify the accuracy of the condition ratings and depiction of the existing pond size/location on the TSD, and consider preserving additional trees among each of the lots proposed.*

The applicant has submitted a formal response to this issue in the form of a letter from Loomis and Associates, which is attached to this report.

2. **Modifications to UDC Requirements:** *concerns were raised regarding modifications from UDC requirements in regard to subdivision design and "PUD" standards. Specifically, thirty percent (30%) common open space is required for a Planned Unit Development, and the access portion of the flag lot (Lot 1) is required to be at least forty (40) feet wide. It was also recognized at the Public Hearing that the thirty (30) foot perimeter buffer requirement was in compliance as of the most recent submittal under review by Staff. Revise the plan to comply with all UDC standards.*

The applicant has revised the Preliminary Plan and is no longer requesting modifications from these UDC standards.

3. **Community Character:** *the compatibility of the "E-1/2AC" Estate Half Acre District proposed in petition P.Z. 11-2018 was recognized as more compatible with the existing character of the community, noting the district's specific requirements pertaining to landscape buffers, provision for community character, and preservation of natural features. Issues were raised with petition P.Z. 07-2019 requesting the "PUD" for this site as the site design and standards proposed would not be compliant with the more favorable regulations of the "E-1/2AC" District. Explain how the proposed preliminary plan preserves the character of the community as described at the Public Hearing and address these concerns.*

In the response letter provided, the applicant notes preserving the existing pond, blue line creek, and as many trees as possible as intentions of maintaining the community character.

4. **Lot 5 and Overbuilding:** *issues were raised at the Public Hearing regarding over-building of the site, specifically in regards to Lot 5 proposed on the Preliminary Plan. The location of Lot 5 and its proximity to the neighboring residences was mentioned as not compatible with surrounding existing conditions. Describe how Lot 5 as proposed is compatible with existing development nearby.*

The applicant stated that the proposed dwelling on Lot 5 is “strategically placed away from the existing subdivision houses as requested by the neighbors.” The proposed 30-foot landscape buffer between Lot 5 and the Old Clarkson Forest subdivision is also noted as maintaining the existing woodland.

5. ***Hydrology and Stormwater:*** *the local ponds and stormwater systems were discussed at the Public Hearing in terms of ensuring their capacity is maintained and that the current flow is not disrupted. Additional items may be required moving forward with this project.*

The applicant acknowledges that they “have done a Hydrology Study showing very little addition of additional water flow added to the creek.” Preservation of the existing pond and a requirement to install an outlet structure to control discharge were also noted as recognizing the concerns regarding stormwater.

PRELIMINARY PLAN

As required for a “PUD” Planned Unit Development, a Preliminary Plan is included for your review. As shown on the Preliminary Plan, the applicant is proposing a total of 6 lots which range in size from 21,874 square feet to 24,451 square feet. The proposed lots extend midway into the street as it is proposed as a private street with one primary access point off of Old Clarkson Road to serve the development, and most of the required landscape buffers are also within individual lots. Developments zoned as one of the straight “E” Estate Districts are not able to include the required landscape buffers or streets (public or private) as part of the individual lots.

The lots proposed on the Preliminary Plan are also irregular in shape and are generally encumbered by various easements for utilities, bioretention basins, and retaining walls that could preclude the installation of future improvements or outdoor living spaces (decks, patios, etc.) on the property, particularly off the rear of the homes. Similar encumbrances include the natural watercourse protection area and areas where the 30-foot perimeter landscape buffer are located within the boundaries of individual buildable lots that are not to be disturbed.

The applicant’s narrative statement attached to this report includes additional details as well as language regarding the character and rationale for the proposed “PUD” to justify their request.

REQUEST

Staff has completed review of this petition and all agency comments have been received. Staff requests action on P.Z. 07-2019 Old Clarkson Rd (Kumara S. Vadivelu).

Attachments

1. Attachment A
2. Resident Correspondence
3. Petitioner’s Response Letter
2. Narrative Statement
3. Preliminary Plan Packet

ATTACHMENT A

All provisions of the City of Chesterfield City Code shall apply to this development except as specifically modified herein.

I. SPECIFIC CRITERIA

A. PERMITTED USES

1. The uses allowed in this Planned Unit Development (PUD) District shall be:
 - a. Dwellings, Single Family Detached.

B. DENSITY REQUIREMENTS

1. The total number of single family residential units shall not exceed six (6) units.

C. DEVELOPMENT STANDARDS

1. Minimum lot size for this development shall be 21,780 square feet.
2. Maximum height of all structures shall be forty-five (45) feet.
3. Structure setbacks shall be as follows:
 - a. Twenty (20) feet from the right-of-way of Old Clarkson Road.
 - b. Twenty (20) feet from the front yard as measured from the private roadway easement depicted on the Preliminary Plan attached hereto as Attachment "B". Flag lots shall have a front yard setback of twenty (20) feet on the access portion and building site portion of the lot.
 - c. Fifteen (15) feet from the side yard.
 - d. Fifteen (15) feet from the rear yard.
4. No building or structure, other than: a freestanding project identification/ornamental entrance monument sign, light standards, retaining walls, or flag poles shall be located within the above listed setbacks.

D. PARKING AND LOADING REQUIREMENTS

1. Parking and loading spaces for this development will be as required in the City of Chesterfield Code.

2. No construction related parking shall be permitted within right of way of Old Clarkson Road or on any existing roadways. All construction related parking shall be confined to the development.
3. Provide adequate temporary off-street parking for construction employees. Parking on non-surfaced areas shall be prohibited in order to eliminate the condition whereby mud from construction and employee vehicles is tracked on to the pavement causing hazardous roadway and driving conditions.

E. LANDSCAPE AND TREE REQUIREMENTS

1. The development shall adhere to the Landscape and Tree Preservation Requirements of the City of Chesterfield Code.
2. A thirty (30) foot Landscape Buffer shall be required along the perimeters of the PUD as identified on the Preliminary Plan attached hereto and marked as Attachment "B".
3. A minimum of thirty percent (30.0%) Common Open Space shall be required for this PUD.
4. A minimum of forty percent (40.0%) tree preservation shall be required for this PUD.

F. SIGN REQUIREMENTS

1. Signs shall be permitted in accordance with the regulations of the City of Chesterfield Code.
2. Ornamental Entrance Monument construction, if proposed, shall be reviewed by the City of Chesterfield for sight distance considerations prior to installation or construction.

G. LIGHT REQUIREMENTS

Provide a lighting plan and cut sheet in accordance with the City of Chesterfield Code.

H. ARCHITECTURAL

The development shall adhere to the Architectural Review Standards of the City of Chesterfield Code.

I. ACCESS/ACCESS MANAGEMENT

1. Access to the development from Old Clarkson Road shall be restricted to one (1) residential street entrance as shown on the Preliminary Plan and adequate sight distance shall be provided, as directed by the City of Chesterfield.

2. If adequate sight distance cannot be provided at the access location(s), acquisition of right-of-way, reconstruction of pavement and other off-site improvements may be required to provide the required sight distance as required by the City of Chesterfield.
3. No lot of this development shall be allowed direct access to Old Clarkson Road.
4. Adequate corner clearance from Old Clarkson Road to the first driveway shall be provided in accordance with City Code and as directed by the City of Chesterfield.

J. PUBLIC/PRIVATE ROAD IMPROVEMENTS, INCLUDING PEDESTRIAN CIRCULATION

1. The streets in this development shall be private and shall remain private forever.
2. Improve one-half of Old Clarkson Road to provide for an ultimate 26-foot wide roadway section including curbs, tapers, sidewalk, enclosed stormwater drainage facilities, etc. The section of Old Clarkson Road to be improved includes the half directly adjacent to the entire 15750 Old Clarkson Road frontage. The road improvements shall be completed as part of this development. In lieu of constructing the required improvements, a Special Cash Escrow may be accepted by the City to guarantee future road improvements.
3. Provide a 5-foot wide sidewalk, conforming to ADA standards, along Old Clarkson Road. The sidewalk shall provide for future connectivity to adjacent developments and/or roadway projects. The sidewalk may be located within right-of-way or on private property within a 6-foot wide sidewalk access easement dedicated to the City of Chesterfield. The sidewalk shall be constructed as part of this development. In lieu of constructing the required improvements, a Special Cash Escrow may be accepted by the City to guarantee future sidewalk improvements.
4. Provide right-of-way dedication, as shown on the Preliminary Plan, such that the right-of-way width of Old Clarkson Road is a minimum of 50 feet wide.
5. Any request to install a gate at the entrance to this development must be approved by the City of Chesterfield. Gate installation will not be permitted on public right-of-way.
6. All roadway and related improvements shall be constructed prior to issuance of building permits exceeding 60%. Delays due to utility relocation and/or adjustment, for which the developer is responsible

monetarily, shall not constitute a cause to issue permits in excess of 60%.

7. Obtain approvals from the City of Chesterfield for locations of proposed curb cuts and access points, areas of new dedication, and roadway improvements.
8. Additional right-of-way and road improvements shall be provided, as required by the City of Chesterfield.

K. TRAFFIC STUDY

Provide a traffic study as directed by the City of Chesterfield, St. Louis County Department of Transportation, and/or Missouri Department of Transportation. The scope of the study shall include internal and external circulation and may be limited to site specific impacts, such as the need for additional lanes, entrance configuration, geometrics, sight distance, traffic signal modifications or other improvements required, as long as the density of the proposed development falls within the parameters of the City's traffic model. Should the density be other than the density assumed in the model, regional issues shall be addressed as directed by the City of Chesterfield.

L. POWER OF REVIEW

Either Councilmember of the Ward where a development is proposed or the Mayor may request that the plan for a development be reviewed and approved by the entire City Council. This request must be made no later than seventy-two (72) hours after Planning Commission review. The City Council will then take appropriate action relative to the proposal. The plan for a development, for purposes of this section, may include the site development plan, site development section plan, site development concept plan, landscape plan, lighting plans, architectural elevations, sign package or any amendment thereto.

M. STORM WATER

1. The site shall provide for the positive drainage of storm water and it shall be discharged at an adequate natural discharge point or an adequate piped system.
2. Storm sewers shall be as approved by the City of Chesterfield and the Metropolitan St. Louis Sewer District.
3. Detention/retention, channel protection, and water quality measures are to be provided in each watershed as required by the City of Chesterfield and the Metropolitan St. Louis Sewer District. The storm water management facilities shall be operational prior to paving of any

- driveways or parking areas in non-residential developments or issuance of building permits exceeding sixty (60%) of the approved dwelling units in each plat, watershed or phase of residential developments. The location and types of storm water management facilities shall be identified on all Site Development Plans.
4. Emergency overflow drainage ways to accommodate runoff from the 100-year storm event shall be provided for all storm sewers, as directed by the City of Chesterfield.
 5. Offsite storm water shall be picked up and piped to an adequate natural discharge point. Such bypass systems must be adequately designed.
 6. The lowest opening of all structures shall be set at least two (2) feet higher than the one hundred (100) year high water elevation in detention/retention facilities. All structures shall be set at least 30 feet horizontally from the limits of the one hundred (100) year high water.
 7. Locations of site features such as lakes and detention ponds must be approved by the City of Chesterfield and the Metropolitan Saint Louis Sewer District.
 8. Design and construct an outfall to the existing lake as shown on the Preliminary Plan and as approved by the City of Chesterfield and the Metropolitan St. Louis Sewer District.
 9. The receiving storm system(s) shall be evaluated, including the existing culvert under Old Clarkson Road, to ensure adequate capacity exists and to ensure that the project has no negative impacts to the existing system(s).
 10. A 404/401 permit may be required from the U.S. Army Corps of Engineers and Missouri Department of Natural Resources. The developer should investigate for and assess the presence of any jurisdictional features on the site, and confirm with these two agencies the applicability of any requirements. If applicable, approvals from these agencies will be required prior to formal MSD plan approval.

N. SANITARY SEWER

1. The receiving sanitary sewer system(s) shall be evaluated to ensure adequate capacity exists and to ensure that the project has no negative impacts to the existing system(s).
2. Sanitary sewers shall be as approved by the City of Chesterfield and the Metropolitan St. Louis Sewer District.

O. GEOTECHNICAL REPORT

Prior to Site Development Plan approval, the developer shall provide a geotechnical report, prepared by a registered professional engineer licensed to practice in the State of Missouri, as directed by the City of Chesterfield. The report shall verify the suitability of grading and proposed improvements with soil and geologic conditions and address the existence of any potential sinkhole, ponds, dams, septic fields, etc., and recommendations for treatment. A statement of compliance, signed and sealed by the geotechnical engineer preparing the report, shall be included on all Site Development Plans and Improvement Plans.

P. MISCELLANEOUS

1. This project is subject to the City of Chesterfield Natural Watercourse Protection requirements. In accordance with the Natural Watercourse Protection requirements, an evaluation of alternatives must be provided for all proposed utility impacts to the Natural Watercourse Protection area.
2. Formal project development plans shall be submitted to MSD for review, approval, and permits.
3. All utilities will be installed underground.
4. Prior to record plat approval, the developer shall cause, at his expense and prior to the recording of any plat, the reestablishment, restoration or appropriate witnessing of all Corners of the United States Public Land Survey located within, or which define or lie upon, the outboundaries of the subject tract in accordance with the Missouri Minimum Standards relating to the preservation and maintenance of the United States Public Land Survey Corners, as necessary.
5. The retaining walls along public right-of-way shall be private and remain private forever and shall be located such that it not necessary to support any public improvements.
6. Retaining walls that serve multiple properties must be located within common ground or special easements, including but not limited to easements needed for future access, maintenance, and inspection of the walls.
7. Prior to final release of subdivision construction deposits, the developer shall provide certification by a registered land surveyor that all monumentation depicted on the record plat has been installed and United States Public Land Survey Corners have not been disturbed during construction activities or that they have been reestablished

and the appropriate documents filed with the Missouri Department of Natural Resources Land Survey Program, as necessary.

II. TIME PERIOD FOR SUBMITTAL OF SITE DEVELOPMENT CONCEPT PLANS AND SITE DEVELOPMENT PLANS

- A.** The developer shall submit a Site Development Plan within eighteen (18) months of City Council approval of the change of zoning.
- B.** In lieu of submitting a Site Development Plan, the petitioner may submit a Site Development Concept Plan and Site Development Section Plans for the entire development within eighteen (18) months of the date of approval of the change of zoning by the City.
- C.** Failure to comply with these submittal requirements will result in the expiration of the change of zoning and will require a new public hearing.
- D.** A Site Development Plan shall be submitted in accordance with the combined requirements for Site Development Section and Concept Plans. The submission of Amended Site Development Plans by sections of this project to the Planning Commission shall be permitted if this option is utilized.
- E.** Where due cause is shown by the developer, the City Council may extend the period to submit a Site Development Concept Plan or Site Development Plan for eighteen (18) months.

III. COMMENCEMENT OF CONSTRUCTION

- A.** Substantial construction shall commence within two (2) years of approval of the Site Development Concept Plan or Site Development Plan, unless otherwise authorized by ordinance.
- B.** Where due cause is shown by the developer, the City Council may extend the period to commence construction for not more than two (2) additional years.

IV. GENERAL CRITERIA

A. SITE DEVELOPMENT PLAN SUBMITTAL REQUIREMENTS

The Site Development Plan shall include, but not be limited to, the following:

1. Location map, north arrow, and plan scale. The scale shall be no greater than one (1) inch equals one hundred (100) feet.
2. Outboundary plat and legal description of property.

3. Density calculations.
4. Parking calculations. Including calculation for all off street parking spaces, required and proposed, and the number, size and location for handicap designed.
5. Provide open space percentage for overall development including separate percentage for each lot on the plan.
6. Provide Floor Area Ratio (F.A.R.).
7. A note indicating all utilities will be installed underground.
8. A note indicating signage approval is separate process.
9. Depict the location of all buildings, size, including height and distance from adjacent property lines, and proposed use.
10. Specific structure and parking setbacks along all roadways and property lines.
11. Indicate location of all existing and proposed freestanding monument signs.
12. Zoning district lines, subdivision name, lot number, dimensions, and area, and zoning of adjacent parcels where different than site.
13. Floodplain boundaries.
14. Depict existing and proposed improvements within 150 feet of the site as directed. Improvements include, but are not limited to, roadways, driveways and walkways adjacent to and across the street from the site, significant natural features, such as wooded areas and rock formations, and other karst features that are to remain or be removed.
15. Depict all existing and proposed easements and rights-of-way within 150 feet of the site and all existing or proposed off-site easements and rights-of-way required for proposed improvements.
16. Indicate the location of the proposed storm sewers, detention basins, sanitary sewers and connection(s) to the existing systems.
17. Depict existing and proposed contours at intervals of not more than one (1) foot, and extending 150 feet beyond the limits of the site as directed.
18. Address trees and landscaping in accordance with the City of Chesterfield Unified Development Code.

19. Comply with all preliminary plat requirements of the City of Chesterfield Subdivision Regulations per the City of Chesterfield Unified Development Code.
20. Signed and sealed in conformance with the State of Missouri Department of Economic Development, Division of Professional Registration, Missouri Board for Architects, Professional Engineers and Land Surveyors requirements.
21. Provide comments/approvals from the appropriate Fire District, Monarch Levee District, Spirit of St. Louis Airport and the Missouri Department of Transportation, Metropolitan St. Louis Sewer District (MSD), and St. Louis County Department of Highways and Traffic.
22. Compliance with Sky Exposure Plane.
23. Compliance with the current Metropolitan Sewer District Site Guidance as adopted by the City of Chesterfield.

V. TRUST FUND CONTRIBUTION

- A.** The developer shall contribute a Traffic Generation Assessment (TGA) to the Chesterfield Village Road Trust Fund (No. 554). This contribution shall not exceed an amount established by multiplying the required parking spaces by the following rate schedule:

<u>Type of Development</u>	<u>Required Contribution</u>
Single Family Dwelling	\$1,265.39/Parking Space

(Parking Space as required by the site-specific ordinance.)

If types of development proposed differ from those listed, rates shall be provided by the St. Louis County Department of Transportation.

If a portion of the improvements required herein are needed to provide for the safety of the traveling public, their completion as a part of this development is mandatory.

Allowable credits for required roadway improvements will be awarded as directed by the St. Louis County Department of Transportation and the City of Chesterfield. Sidewalk construction and utility relocation, among other items, are not considered allowable credits.

- B.** As this development is located within a trust fund area established by St. Louis County, any portion of the traffic generation assessment contribution which remains following completion of road improvements required by the development shall be retained in the appropriate trust fund.

- C.** Traffic Generation Assessment contributions shall be deposited with St. Louis County Department of Transportation. The deposit shall be made prior to the issuance of a Special Use Permit (S.U.P) by St. Louis County Department of Transportation or prior to the issuance of building permits in the case where no Special Use Permit is required. If development phasing is anticipated, the developer shall provide the Traffic Generation Assessment contribution prior to the issuance of building permits for each phase of development. Funds shall be payable to Treasurer, St. Louis County.
- D.** The amount of all required contributions, if not submitted by January 1, 2020, shall be adjusted on that date and on the first day of January in each succeeding year thereafter in accordance with the construction cost index as determined by the St. Louis County Department of Transportation.

VI. RECORDING

Within sixty (60) days of approval of any development plan by the City of Chesterfield, the approved Plan will be recorded with the St. Louis County Recorder of Deeds. Failure to do so will result in the expiration of approval of said plan and require re-approval of a plan by the Planning Commission.

VII. ENFORCEMENT

- A.** The City of Chesterfield, Missouri will enforce the conditions of this ordinance in accordance with the Plan approved by the City of Chesterfield and the terms of this Attachment A.
- B.** Failure to comply with any or all the conditions of this ordinance will be adequate cause for revocation of approvals/permits by reviewing Departments and Commissions.
- C.** Non-compliance with the specific requirements and conditions set forth in this Ordinance and its attached conditions or other Ordinances of the City of Chesterfield shall constitute an ordinance violation, subject, but not limited to, the penalty provisions as set forth in the City of Chesterfield Code.
- D.** Waiver of Notice of Violation per the City of Chesterfield Code.
- E.** This document shall be read as a whole and any inconsistency to be integrated to carry out the overall intent of this Attachment A.

From: Jamie Hanagan <[REDACTED]>
Sent: Monday, July 01, 2019 3:35 PM
To: Andrew Stanislav
Subject: 15750 Old Clarkson Road

July 1, 2019

Mr. Stanislav,

Thank you for thoughtfully considering the issues brought forth by the Old Clarkson Road residents regarding 15750 Old Clarkson Road at the meetings on November 14th and June 12th. I am writing today to provide a summary of our issues in hopes that you will make, what we believe, is the right zoning designation for this property. We appreciate the fact that we live in a city that is prosperous and growing; development within our city and our neighborhood is a good indicator of the economic stability in which we are surrounded by. However, the residents along Old Clarkson Road are united in the belief that zoning changes and development along Old Clarkson Road should be in line with the character of the existing nature corridor.

When the developers constructed our homes in the 1970s, they took great care to preserve the mature trees by building homes into the landscape rather than clearing the land. As you saw in numerous photos throughout our presentation, our homes and common areas are surrounded by large, century old trees. These trees contribute to Chesterfield's designation as a Tree City but also stabilize soils, reduce noise and air pollution, reduce energy costs, increase real estate values, and enhance aesthetic appeal, all of which are noted to be valuable in Chesterfield's tree ordinance. Furthermore, land clearing will result in the displacement of numerous wildlife. Wildlife displacement will lead to traffic collisions on Clarkson Road and will burden the forested area with an increase in habitat.

Changing the zoning designation to R2 is inconsistent with the character of the Old Clarkson Road nature corridor. The homes along Old Clarkson Road are constructed within the forest and designated as R1A or NU. Designating the proposed property as E1/2 AC would result in a "win" for all parties involved. E1/2 AC designation would allow the developer to buy the property and build the number of homes he is planning but also will provide the protections necessary to preserve the character of the Old Clarkson Road neighborhood. The rules and regulations set forth by the E series of zoning designations address the character of the neighborhood by requiring enhancement of the residential development using well-buffered, well-landscaped neighborhoods. R2 zoning designations do not require such enhancements.

In regards to granting the developer a PUD, we believe this would result in very little change to the developer's original site plan, which is more consistent with R2 zoning. Please carefully consider granting the developer only E1/2AC zoning, as this zoning designation is a good compromise for all parties involved.

Finally, the city of Chesterfield should require the developer to obtain performance bond protection. Mr. Vadivelu has a history of filing for bankruptcy, owns a very small company, and is a new face to development in the city of Chesterfield. We urge the city to request performance bond protection to shield neighborhood property values in the event the project is not completed.

Please reach out with any questions. Thank you, in advance, for your careful consideration.

Jamie Hanagan

President

Old Clarkson Forest Homeowner's Association

217-827-2967

From: Greg Miller <[REDACTED]>
Sent: Wednesday, July 03, 2019 10:34 AM
To: Andrew Stanislav
Subject: 15750 Old Clarkson

Andrew,

I'm writing to you to express my concern about the zoning of the parcel at 15750 Old Clarkson. This area of chesterfield is defined by the large, mature trees and forest. It is the main reason many of us live in this area.

I urge the zoning commission to leave the zoning of the parcel unchanged. Development of the parcel would greatly diminish this forested corridor.

Regards,

Greg Miller
1931 Rustic Oak Road

Sent from my iPhone

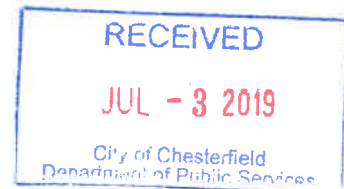
AZACK CONSTRUCTION COMPANY LLC

11607 Francetta Lane
St. Louis, MO. 63138

314-520-6844
Fax 636-489-4733

07/02/19

Mr. Andrew Stanislav
City of Chesterfield, Missouri
690 Chesterfield Parkway West
Chesterfield, Missouri 63017-0760



RE: P.Z. 11-2018 15750 Old Clarkson Road (NU to E-1/2 AC)
P.Z. 07-2019 15750 Old Clarkson Road (E- 1/2 AC to PUD)
Reply to June 14 City Review letter: Items 1-5

Dear Mr. Stanislav:

Please accept this correspondence as adhering to your request for a written response to how items 1-5 of the aforementioned review letter were addressed. I have responded according to your numbering system.

1. Tree Preservation and Mature Trees – Loomis and Associates have addressed this item in a separate letter.
2. The two modifications items mentioned here to the UDC requirement have been accommodated and don't need those modifications anymore.
3. As for maintaining the Community Character of the neighborhood, we are preserving the existing Pond as is as well as maintaining the Blue Line Creek on the south and west of our property. We are maintaining as much of the existing trees as possible throughout the property as possible.
4. Lot 5 house has been strategically placed away from the existing subdivision houses as requested by the neighbors. Besides there is a 30' Landscape Buffer with existing woodland left in place.
5. Hydrology and Stormwater – We have done a Hydrology Study showing very little addition of additional water flow added to the creek from our development. We had no intention of doing anything to the existing Pond on our site. City is requesting us to add an outlet structure to the pond. We are in agreement with this requirement as it will allow us to control the discharge and discharge point of any unusual or heavy stormwater event. We will view this as an attempt to help the existing stream's hydraulics and to protect as much as possible the adjacent home owners.

A handwritten signature in black ink, appearing to read "Kumara S. Vadivelu".

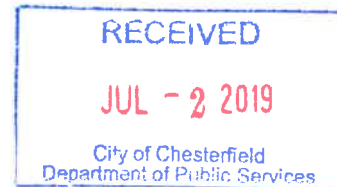
Kumara S. Vadivelu



loomisAssociateslandscapeArchitects/planners
750 Spirit 40 Park Drive
Chesterfield, MO 63005-1194
(636) 519-8668
e-mail: bbage@loomis-associates.com

City of Chesterfield
Attn: Andrew Stanislav
690 Chesterfield Parkway West
Chesterfield, Missouri 63017

RE: P.Z. 11-2018 15750 Old Clarkson Road
P.Z. 07-2019 15750 Old Clarkson Road



Dear Mr. Stanislav,

In your June 14, 2019 correspondence related to the 15750 Old Clarkson Road project (P.Z. 11-2018 and P.Z. 07-2019), comment #1 requests a verification of the condition ratings and the depiction of the existing pond size/location on the TSD.

I have reviewed my findings and ratings and stand by the information found on the Tree Stand Delineation (TSD). Without getting into specifics of individual trees, most of the trees in this woodland do not exhibit characteristics that merit a rating above average due to my observation of the amount of deadwood and visible damage found in trees in this woodland.

The second part of the comment #1 regarding the existing pond size will be more clearly delineated on the revised TSD drawing.

Respectfully,

LOOMIS ASSOCIATES, INC.

Brian Bage, ISA
Certified Arborist MW-5033A

CLARKSON HILLS RESERVE Zoning Narrative Statement

a. General Description of the Proposal:

Arch City Group is proposing to develop a 4.8 Acres of property along Old Clarkson Road and is requesting an E-1/2 AC PUD zoning in order to permit the development. The project consists of 5 large, wooded, new building sites around the existing 5600 sf house in the middle. Arch City Group will be building High End Homes 3000 to 4500 sf size with 3 car garage with many upgrades as standard in the base. Arch City Group has made every effort to preserve the many existing natural resources located on site. This project meets and exceeds all of the relevant PUD requirements.

b. List of requested uses:

Arch City Group is requesting single family detached residential use for the entire site. The site will also contain common ground and the streets inside the property will be private streets which will be designed and constructed in accordance with the City's guidelines for residential construction.

c. Proposed Land Uses and development standards

Arch City Group is requesting a single family detached residential use for the site. The development standards are noted throughout this application and identified on the plan. The proposed density is above ½ acre. The plan includes 6 lots on a 4.8 acres.

The maximum building height will be a maximum of forty five feet which is consistent with the E-1/2 AC district.

The minimum front yard setback will be 20'. The minimum rear yard setback will be 15' and the minimum side yard setback will be 15'.

d. Exceptions or variations from the requirement of the Zoning Ordinance:

Pursuant to the City's Zoning Code, the purpose of the PUD is to encourage flexibility to the density requirements and development standards of the zoning ordinance. In the calculation of the lot size the Landscape buffer and the roadway easement is all included to achieve the minimum ½ acre lots size. This allows for the inclusion of more common ground and preserve the existing creek untouched on the south and west side of the property.

e. Phases of construction

Arch City Group anticipates the entire site will be developed in one phase.

f. Landscaping and Tree Preservation:

Arch City Group is proposing to preserve over 40% of the existing tree canopy which is quite a bit more than the minimum 30% required by the City. The Preservation of these trees is an important characteristic of the overall community and is also identified as a key design feature for the PUD in the City's Zoning Code.

In addition to the tree preservation, Arch City Group will provide extensive landscaping throughout the community.

g. Character of and rationale for the PUD:

The City's zoning code states that the purpose of the PUD District is to encourage flexibility to the density requirements and development standards of the zoning ordinance that will result in exceptional design, character, and quality of new development; to promote the most appropriate use of the land; to facilitate the provision of streets and utilities; and to preserve the natural and scenic features and open space.

First, Arch City Group wanted a project to compliment the existing communities in the area. After careful study of the surrounding area, Arch City Group determined that a R-2 or E-1/2 AC Estate zoning would be most appropriate for the site, since it is surrounded by R-2, R1A, R-6 and R6A. While the E-1/2 AC Estate zoning does not yield as many homes, it is important to preserve the natural characteristics of the Old Clarkson Corridor. The City's Zoning Code identifies compatibility with surrounding land uses and the Comprehensive Plan as a "general consideration" for the PUD.

Site contains many natural features and Arch City Group has sought to preserve many of these features. The natural features will also enhance the desirability of the location which contributes to the sustainability of the community. The environmental benefits of preserving these natural resources are numerous. The natural vegetation will cleanse and filter storm water and recharge the groundwater. In addition to the many environmental benefits, these features serve to provide residents with an identity to their community which further promotes sustainability. The preservation of these natural features achieves another design feature of the PUD identified in the City's Zoning Code.

As always Arch City Group wants to design a subdivision with lots of the upgraded architectural features as standard in its design.

The PUD is necessary in order to allow for flexibility in some of the design standards in E-1/2 AC Estate zoning category while preserving many of the natural resources on the site. Most notably, to achieve the minimum ½ acre lot size, Arch City Group would like to include the Landscape Buffer and Streets rights a way areas to be included in the lot size area calculation.

Based on the site plan, Arch City Group anticipates that nearly 43% of the site will be left untouched in it's natural state. These natural areas will not be graded and the natural slopes and vegetation will remain. The PUD section of the City's Zoning Code states that maintaining existing topography, soils and vegetation is a design feature for the PUD.

The design and construction of homes with an architectural vernacular that exceeds the typical building designs is also noted as a design feature in the PUD section of the City's Zoning Code. This design feature is achieved by offering Arch City Group's standard design which in itself is a high-end home with all usual upgrades as standard. Three Car Garages, Stone and Brick elements and low maintenance exteriors.

The City's Zoning Code identifies environmentally conscious building techniques as a design feature of the PUD. Arch City Group offers several sustainable and environmentally conscious features as standard in its design like energy efficient appliances, low-e windows, high efficiency HVAC systems etc.

Old Clarkson Road
LINE OF SIGHT
6.24.19



Scale: 1"=30'

AREA INLET
T=548.45
SITE BM #1
ELEV.=553.14

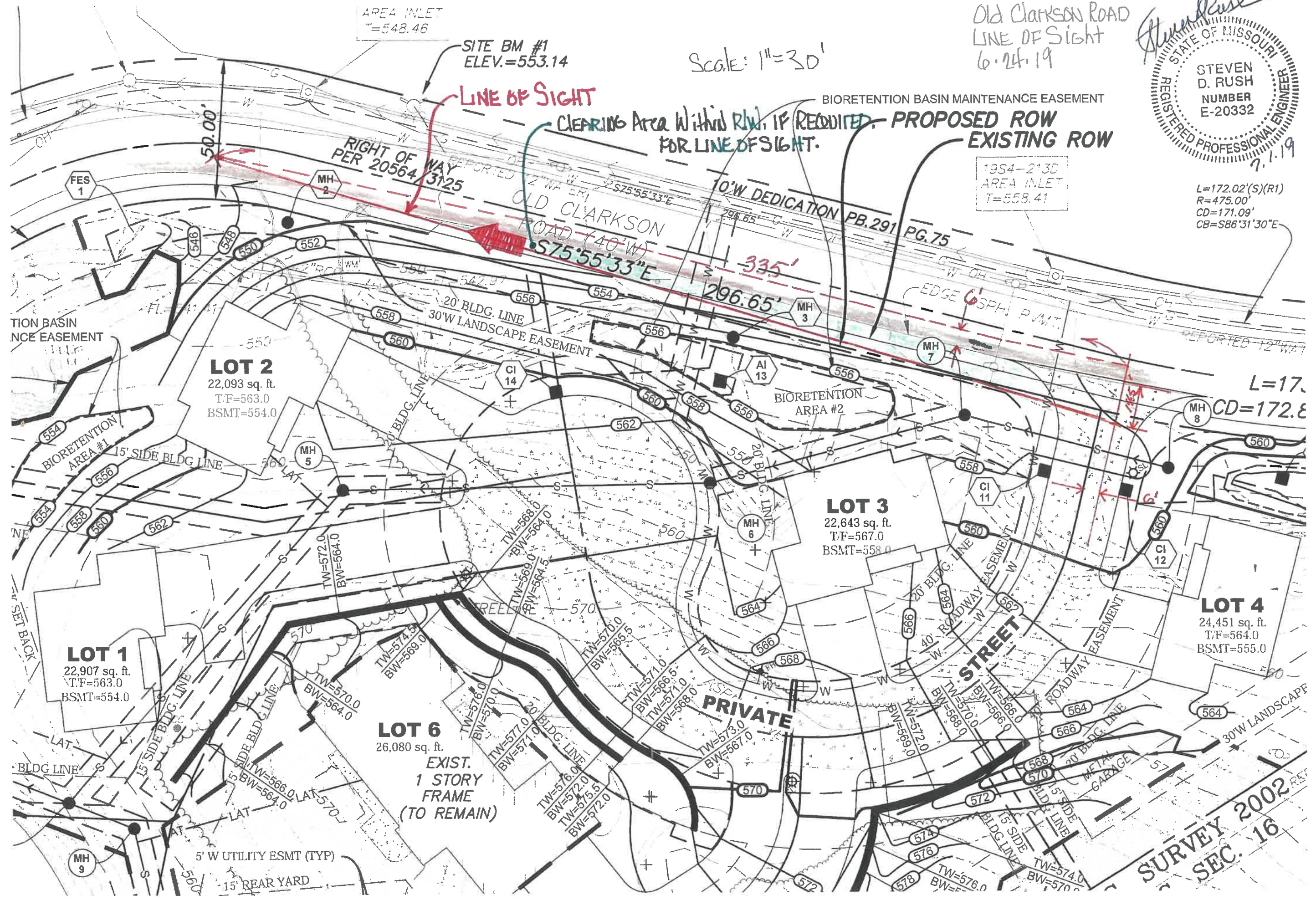
LINE OF SIGHT

CLEARING Area Within R.W. IF REQUIRED FOR LINE OF SIGHT.

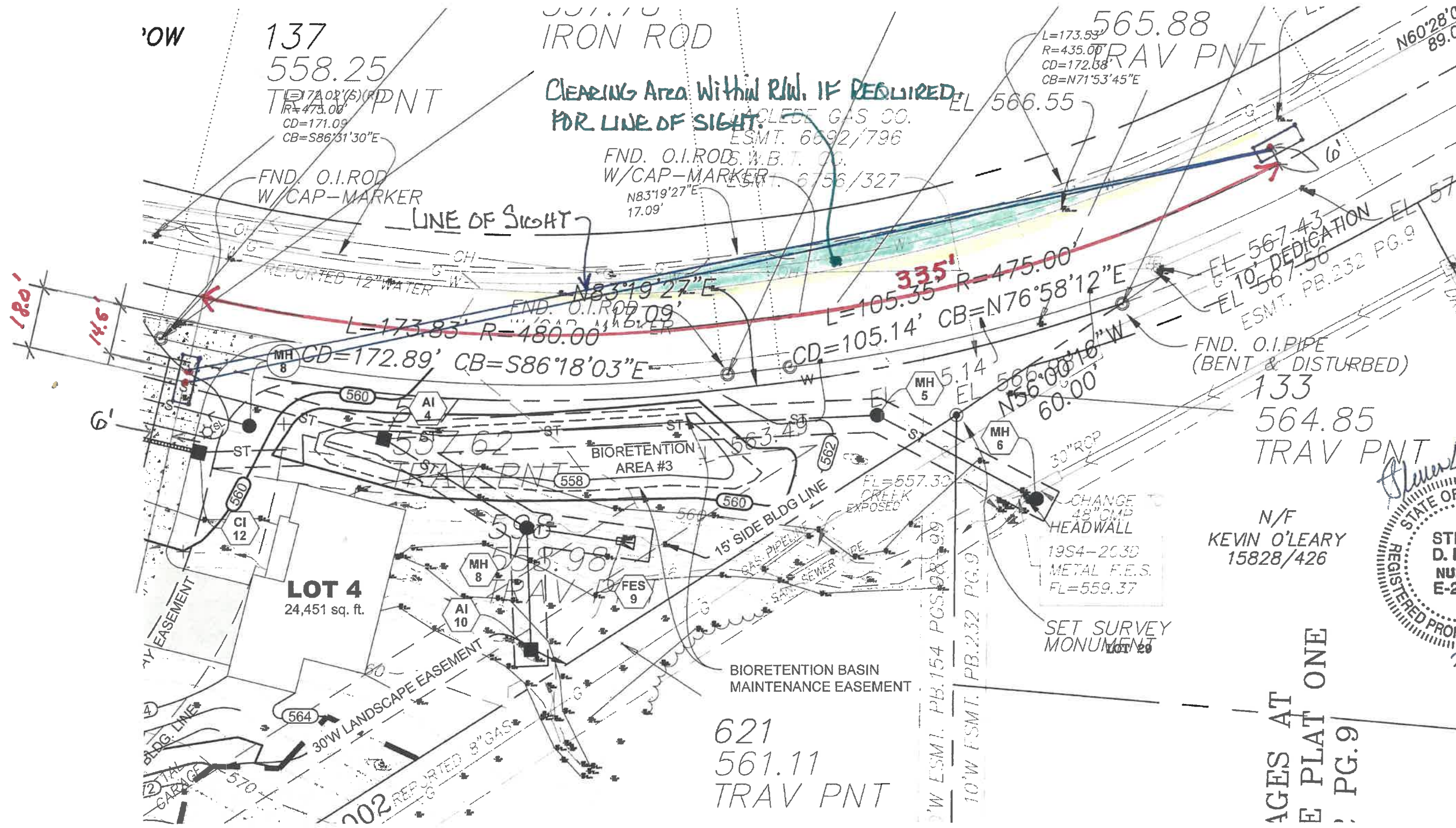
BIORETENTION BASIN MAINTENANCE EASEMENT
PROPOSED ROW
EXISTING ROW

19S4-213D
AREA INLET
T=558.41

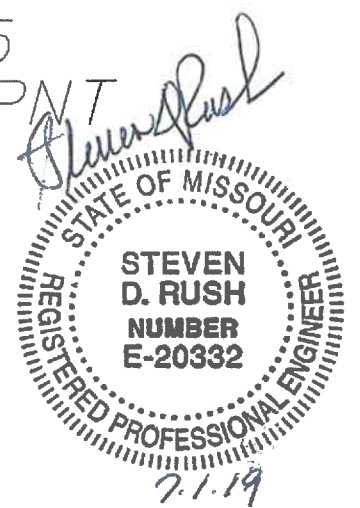
L=172.02'(S)(R1)
R=475.00'
CD=171.09'
CB=S86°31'30"E



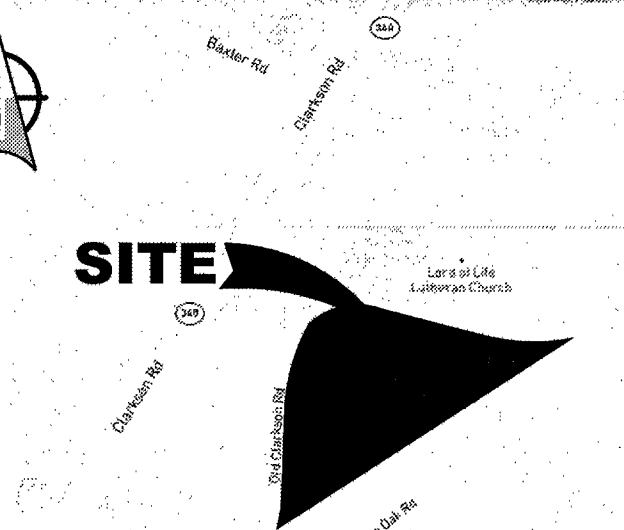
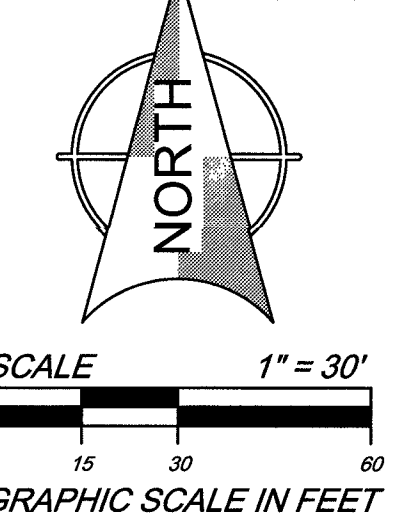
SURVEY 2002
SEC. 16



Scale: 1" = 30'



PRELIMINARY DEVELOPMENT PLAN



L=154.10'
R=130.00'
CD=145.23'
CB=N70°06'57"E

1954-216D
MANHOLE
T=548.14

1954-217D
MANHOLE
NOT FOUND

1954-218D
AREA INLET
T=545.91

1954-162S
MANHOLE
T=547.95

1954-219D
MANHOLE
T=546.22

1954-1085
MANHOLE
T=547.60
FL=534.50

1954-107S
MANHOLE
T=553.36
FL=537.76

1954-121S
MANHOLE
T=548.64
FL=538.49

1954-107S
MANHOLE
T=553.36
FL=537.76

1954-107S
MANHOLE
T=553.36
FL=537.76

1954-107S
MANHOLE
T=553.36
FL=537.76

1954-107S
MANHOLE
T=553.36
FL=537.76

1954-107S
MANHOLE
T=553.36
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FL=537.76

1954-107S
MANHOLE
T=553.36
FL=537.76

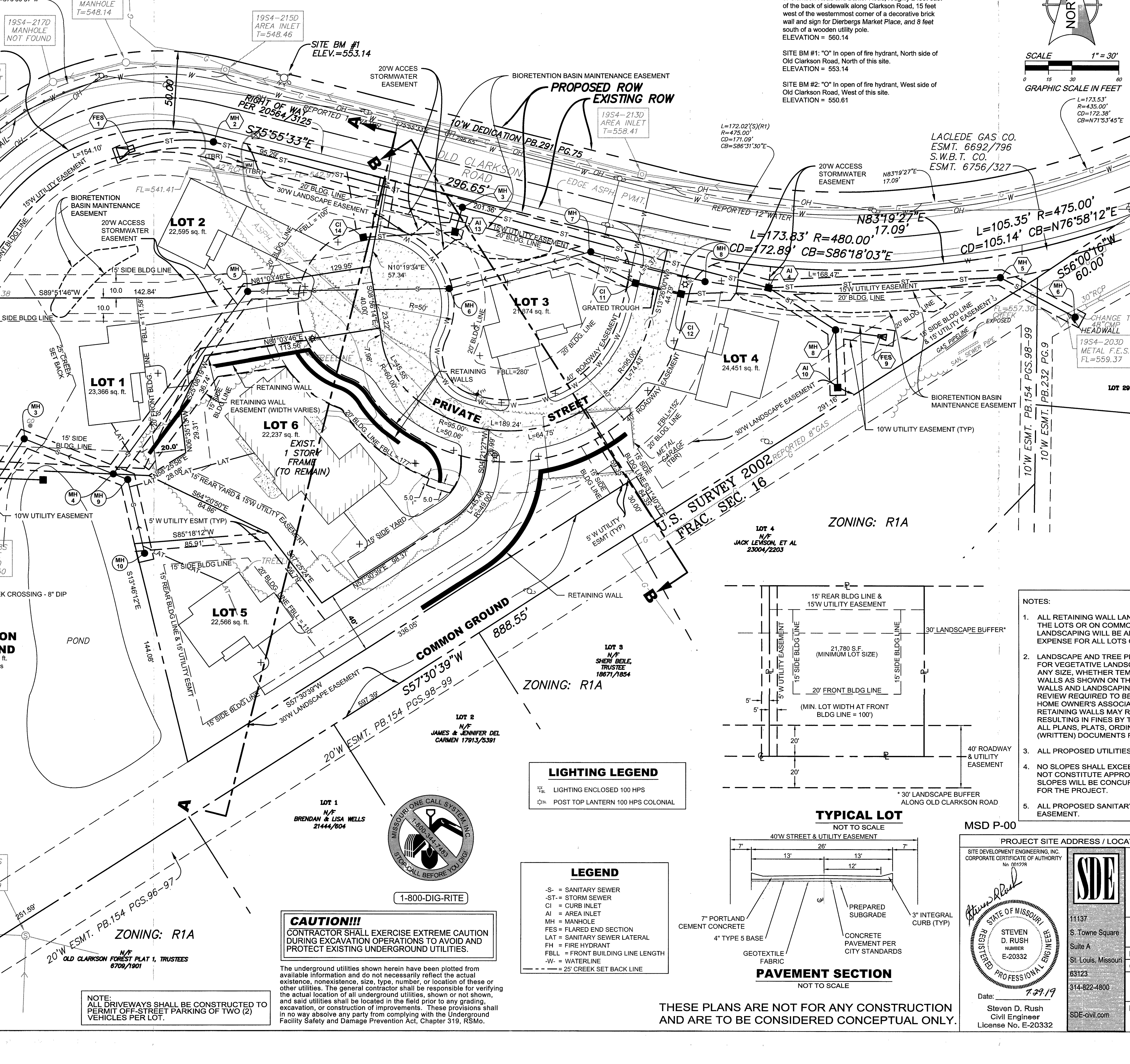
1954-107S
MANHOLE
T=553.36
FL=537.76

1954-107S
MANHOLE
T=553.36
FL=537.76

1954-107S
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T=553.36
FL=537.76

1954-107S
MANHOLE
T=553.36
FL=537.76

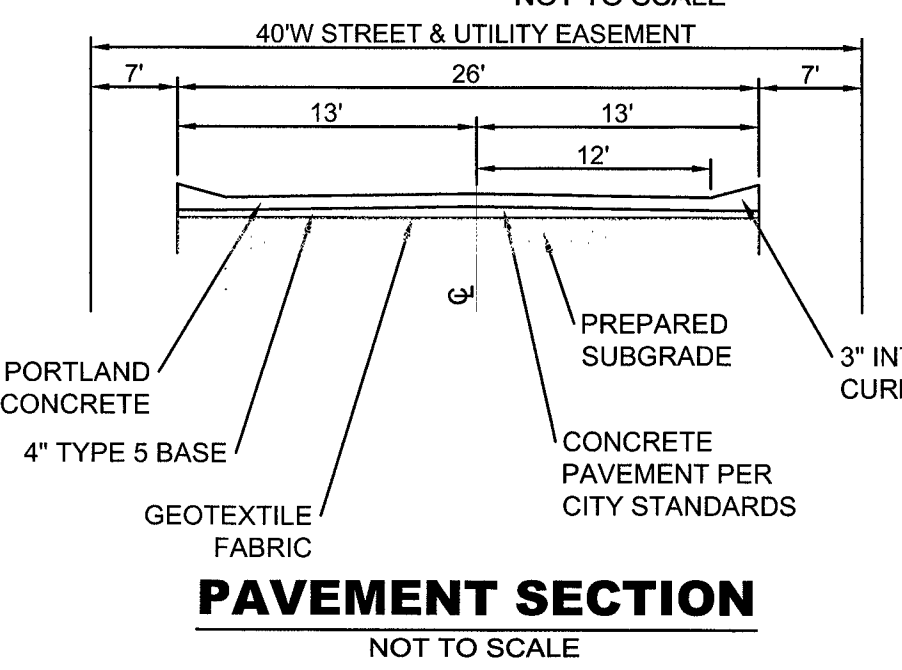
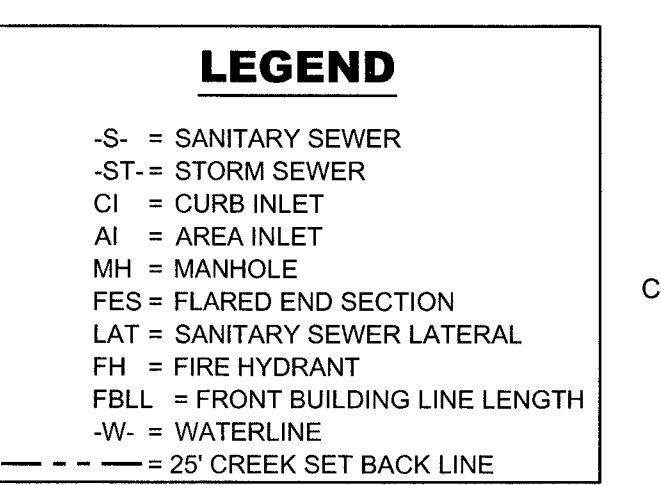
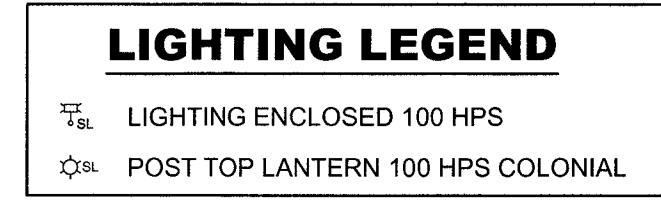
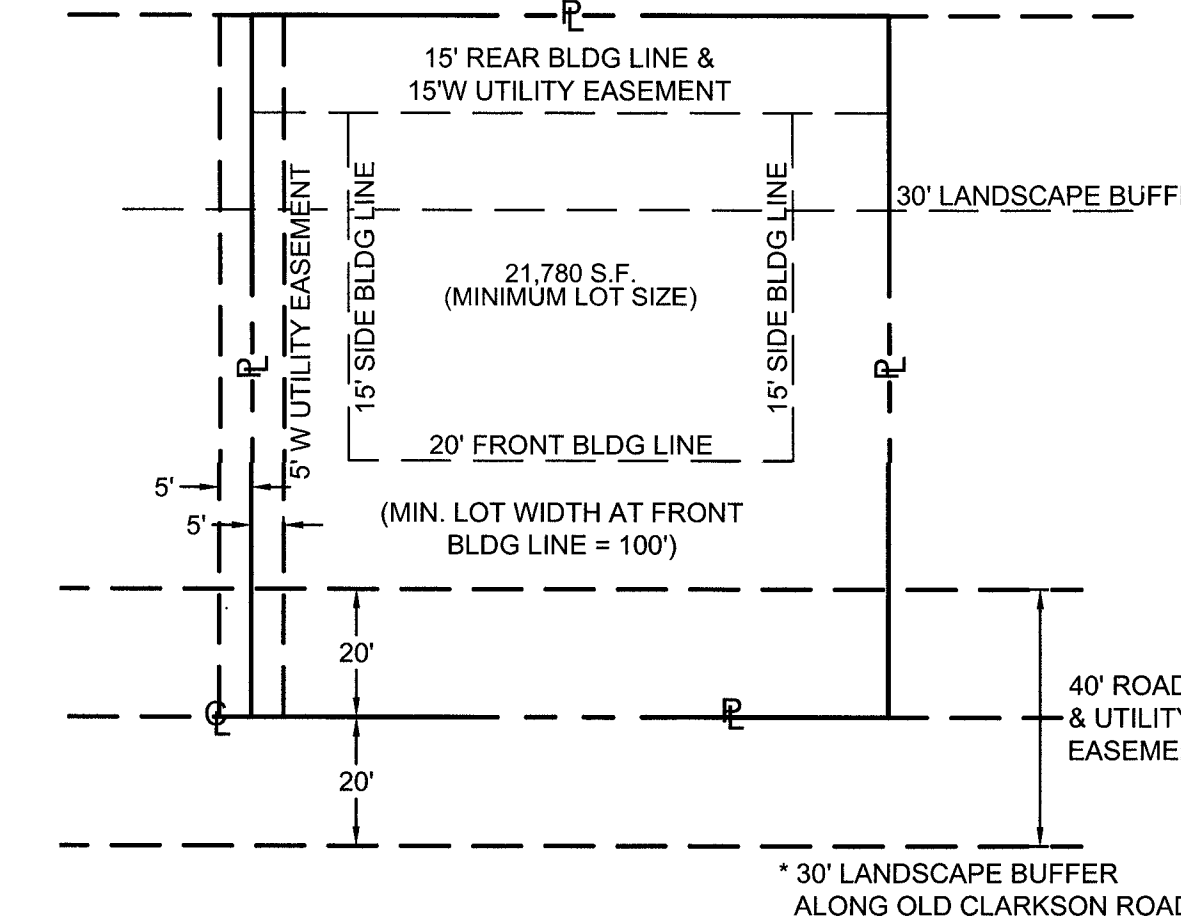
1954-107S
MANHOLE
T=553.36
FL=537.76



LOCATION MAP NOT TO SCALE PROJECT INFORMATION

- ADDRESS OF SITE: 15750 OLD CLARKSON RD CHESTERFIELD, MO 63017
- PROPERTY OWNER: GROSZ RICK B AND CAROL L. HW 15750 OLD CLARKSON ROAD CHESTERFIELD, MO 63017
- OWNER UNDER CONTRACT: ARCH CITY GROUP, LLC 305 AVANTI COURT OF FALLOM, MO 63368
- LOCATOR NUMBER: 19S130015
- CURRENT ZONING: "NU" (NON-URBAN)
- PROPOSED ZONING: E-1/2 ACRE AND P.U.D.
- AREA OF SITE: 207,516 S.F. (4.76 AC.)
- MINIMUM LOT SIZE: 21,780 S.F.
- SCHOOL DISTRICT: PARKWAY
- FIRE DISTRICT: MONARCH
- EXISTING USE: SINGLE FAMILY RESIDENCE
- PROPOSED USE: 6 RESIDENTIAL LOTS
- BUILDING SETBACKS: FRONT: 20 FEET SIDE: 15 FEET REAR: 15 FEET
- ALLOWABLE BUILDING HEIGHT: 3 STORIES OR 45' IN HEIGHT
- TOTAL DISTURBED AREA = 116,758 SF = 2.68 AC
- TOTAL NON-DISTURBED AREA = 90,758 SF = 2.08 AC = 43.74%
- STORM DIFFERENTIAL RUNOFF (15 YR - 20 MIN): 1.11 CFS
- COMMON GROUND AREA = 63,975 SF = 30% OF TRACT
- AREA OF OPEN SPACE: 3.75 AC = 78.8%
- THE MOUNTED HEIGHT OF PROPOSED LIGHT FIXTURES SHALL NOT BE LESS THAN 16 FEET ABOVE GRADE.

- ### NOTES:
- ALL RETAINING WALL LANDSCAPE EASEMENTS WILL BE LOCATED WITHIN THE BOUNDARIES OF THE LOTS OR ON COMMON GROUND. MAINTENANCE OF THE RETAINING WALLS AND LANDSCAPING WILL BE ADDRESSED IN THE SUBDIVISION INDENTURES AND WILL BE A COMMON EXPENSE FOR ALL LOTS OF THIS SUBDIVISION.
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 - ALL PROPOSED UTILITIES SHALL BE INSTALLED UNDERGROUND.
 - NO SLOPES SHALL EXCEED 3 (HORIZONTAL) TO 1 (VERTICAL). APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF SLOPES IN EXCESS OF 3:1. REVIEW OF PROPOSED STEEP SLOPES WILL BE CONCURRENT WITH THE REVIEW OF THE GRADING OR IMPROVEMENT PLANS FOR THE PROJECT.
 - ALL PROPOSED SANITARY AND STORM SEWERS SHALL BE COVERED BY A 10' WIDE UTILITY EASEMENT.



CAUTION!!!
CONTRACTOR SHALL EXERCISE EXTREME CAUTION DURING EXCAVATION OPERATIONS TO AVOID AND PROTECT EXISTING UNDERGROUND UTILITIES.

The underground utilities shown herein have been plotted from available information and do not necessarily reflect the actual existence, nonexistence, size, type, number or location of these or other utilities. The general contractor shall be responsible for verifying the actual location of all underground utilities, shown or not shown, and said utilities shall be located in the field prior to any grading, excavation, or construction of improvements. These provisions shall in no way absolve any party from complying with the Underground Facility Safety and Damage Prevention Act, Chapter 319, RSMo.

NOTE:
ALL DRIVEWAYS SHALL BE CONSTRUCTED TO PERMIT OFF-STREET PARKING OF TWO (2) VEHICLES PER LOT.

THESE PLANS ARE NOT FOR ANY CONSTRUCTION AND ARE TO BE CONSIDERED CONCEPTUAL ONLY.

MSD P-00 MSD BASE MAP NO. 19S

PROJECT SITE ADDRESS / LOCATION: 15750 OLD CLARKSON RD., CHESTERFIELD, MO 63017

SITE DEVELOPMENT ENGINEERING, INC.
CORPORATE CERTIFICATE OF AUTHORITY
No. 001228

SDE SITE DEVELOPMENT ENGINEERING, INC.
PLANNING • CONSULTING • CIVIL ENGINEERING

11137 S. Towne Square
Suite A
St. Louis, Missouri 63123
314-822-4800
SDE-civil.com

DATE: APR. 11, 2018
CHECKED BY: SDR
JOB NO.: 218-110
DRAWN BY: JDF
SCALE: 1" = 30'

15750 OLD CLARKSON ROAD
SITE, PAVING AND UTILITY PLAN

REV: 05/28/19: Rev Lot 5, Ret. Walls, Top of Bank
06/02/19: Add sheet 3 of 3
07/01/19: City Review
07/23/19: City Review

Steven D. Rush
Civil Engineer
License No. E-20332

STEVEN D. RUSH
REGISTERED PROFESSIONAL ENGINEER
No. 020332

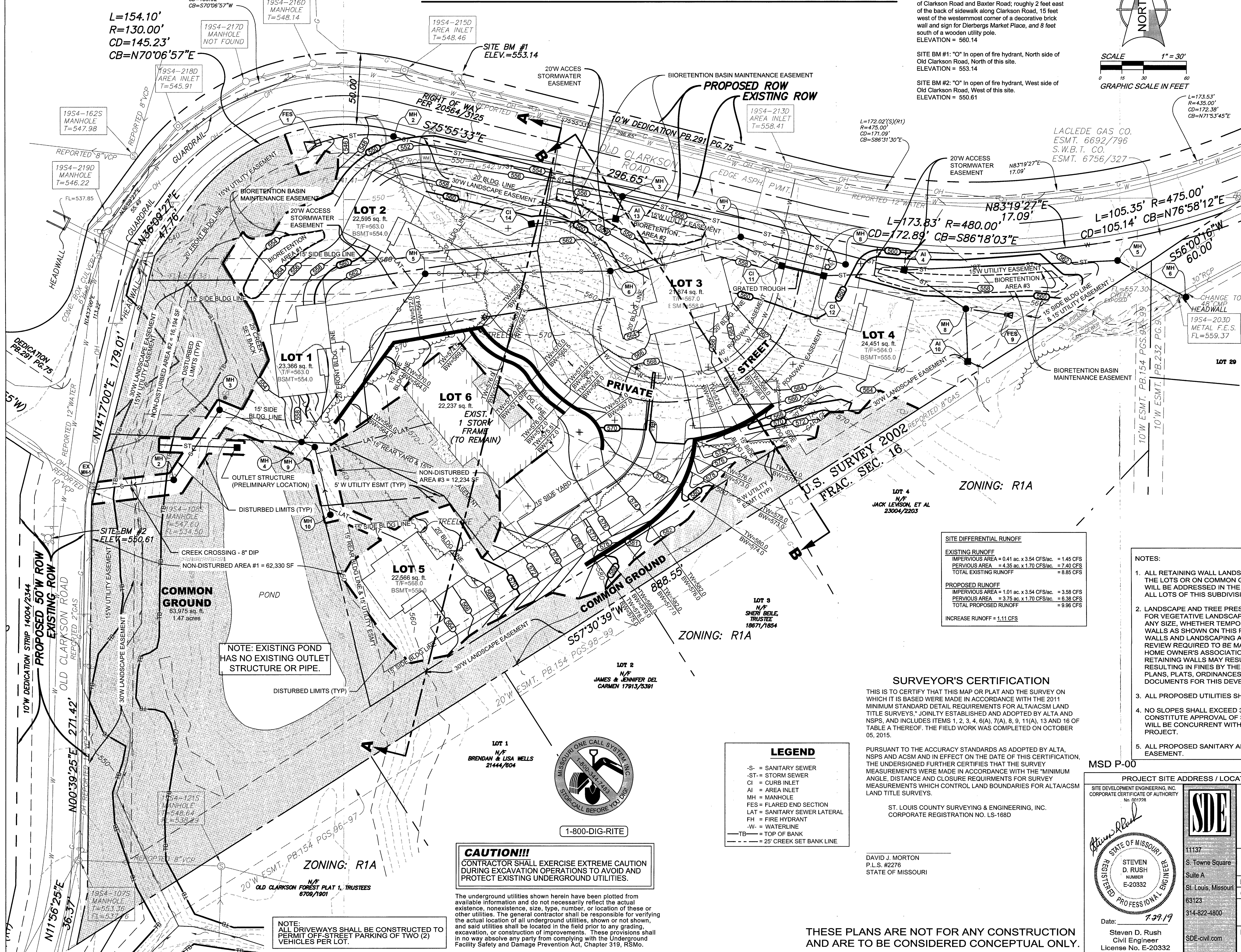
DATE: 7/29/19

SHEET: 1 of 3



1-800-DIG-RITE

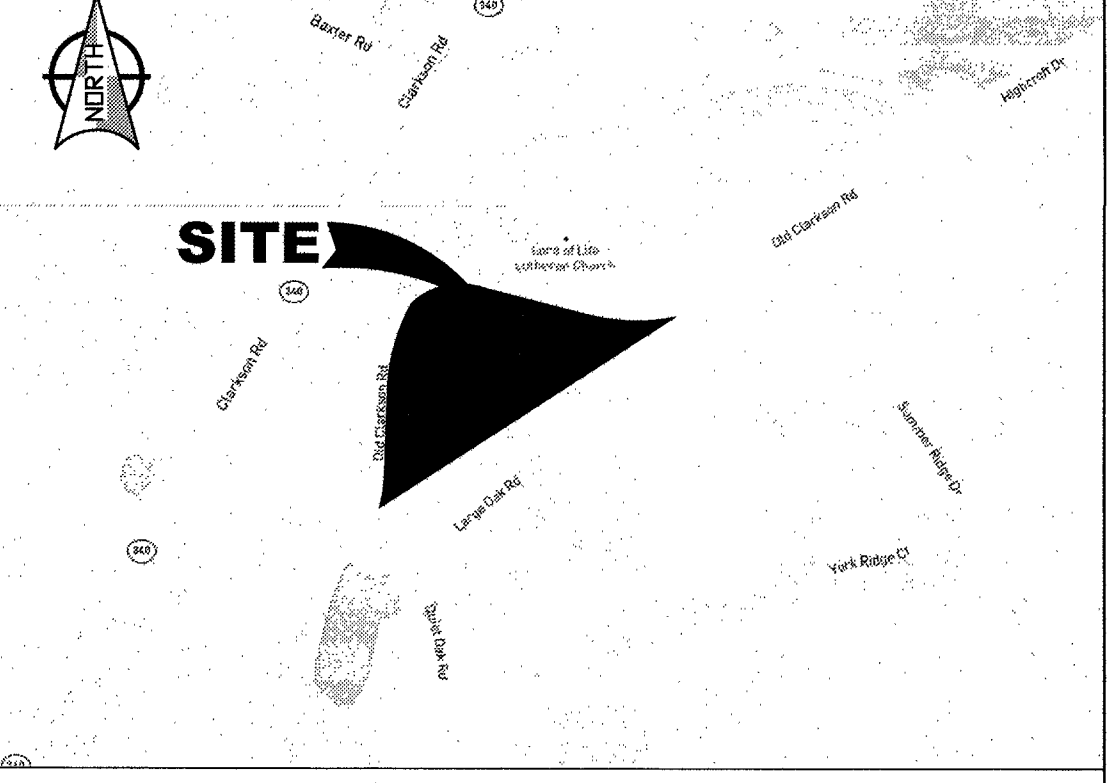
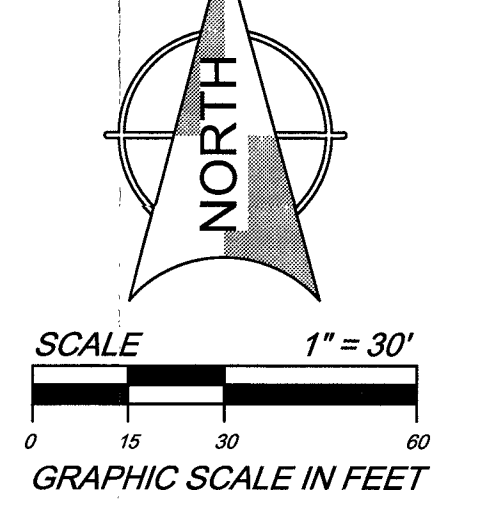
PRELIMINARY DEVELOPMENT PLAN



BM#12336 NGVD09 Elev = 560.14
Cut "L" in the southwest corner of flush style traffic signal vault in grass area northeast of the intersection of Clarkson Road and Baxter Road; roughly 2 feet east of the back of sidewalk along Clarkson Road, 15 feet west of the westernmost corner of a decorative brick wall and sign for Dierbergs Market Place, and 8 feet south of a wooden utility pole.
ELEVATION = 560.14

SITE BM #1: "O" in open of fire hydrant, North side of Old Clarkson Road, North of this site.
ELEVATION = 553.14

SITE BM #2: "O" in open of fire hydrant, West side of Old Clarkson Road, West of this site.
ELEVATION = 550.61



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- AREA OF OPEN SPACE: 3.75 AC = 78.8%
- THE MOUNTED HEIGHT OF PROPOSED LIGHT FIXTURES SHALL NOT BE LESS THAN 16 FEET ABOVE GRADE.

SITE DIFFERENTIAL RUNOFF

EXISTING RUNOFF	
IMPERVIOUS AREA = 0.41 ac. x 3.54 CFS/ac.	= 1.45 CFS
PERVIOUS AREA = 4.35 ac. x 1.70 CFS/ac.	= 7.40 CFS
TOTAL EXISTING RUNOFF	= 8.85 CFS
PROPOSED RUNOFF	
IMPERVIOUS AREA = 1.01 ac. x 3.54 CFS/ac.	= 3.58 CFS
PERVIOUS AREA = 3.75 ac. x 1.70 CFS/ac.	= 6.38 CFS
TOTAL PROPOSED RUNOFF	= 9.96 CFS
INCREASE RUNOFF = 1.11 CFS	

- NOTES:**
- ALL RETAINING WALL LANDSCAPE EASEMENTS WILL BE LOCATED WITHIN THE BOUNDARIES OF THE LOTS OR ON COMMON GROUND. MAINTENANCE OF THE RETAINING WALLS AND LANDSCAPING WILL BE ADDRESSED IN THE SUBDIVISION INDENTURES AND WILL BE A COMMON EXPENSE FOR ALL LOTS OF THIS SUBDIVISION.
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 - ALL PROPOSED SANITARY AND STORM SEWERS SHALL BE COVERED BY A 10' WIDE UTILITY EASEMENT.

SURVEYOR'S CERTIFICATION

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS* JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 6(A), 7(A), 8, 9, 11(A), 13 AND 16 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON OCTOBER 05, 2015.

PURSUANT TO THE ACCURACY STANDARDS AS ADOPTED BY ALTA, NSPS AND ACSM AND IN EFFECT ON THE DATE OF THIS CERTIFICATION, THE UNDERSIGNED FURTHER CERTIFIES THAT THE SURVEY MEASUREMENTS WERE MADE IN ACCORDANCE WITH THE "MINIMUM ANGLE, DISTANCE AND CLOSURE REQUIREMENTS FOR SURVEY MEASUREMENTS WHICH CONTROL LAND BOUNDARIES FOR ALTA/ACSM LAND TITLE SURVEYS."

ST. LOUIS COUNTY SURVEYING & ENGINEERING, INC.
CORPORATE REGISTRATION NO. LS-168D

DAVID J. MORTON
P.L.S. #2276
STATE OF MISSOURI

MSD P-00 PROJECT SITE ADDRESS / LOCATION: 15750 OLD CLARKSON RD., CHESTERFIELD, MO 63017
MSD BASE MAP NO. 19S

SDE
SITE DEVELOPMENT ENGINEERING, INC.
CORPORATE CERTIFICATE OF AUTHORITY
No. 001228

STEVEN D. RUSH
REGISTERED PROFESSIONAL ENGINEER
NUMBER E-20332

Date: 7.29.19

Steven D. Rush
Civil Engineer
License No. E-20332

SDE
SITE DEVELOPMENT ENGINEERING, INC.
PLANNING • CONSULTING • CIVIL ENGINEERING

11137 S. Towne Square Suite A St. Louis, Missouri 63123 314-822-4800 SDE-civil.com

15750 OLD CLARKSON ROAD

DATE: APR. 11, 2018 JOB NO.: 218-110 DRAWN BY: JDF
CHECKED BY: SDR SCALE: 1" = 30'

GRADING PLAN

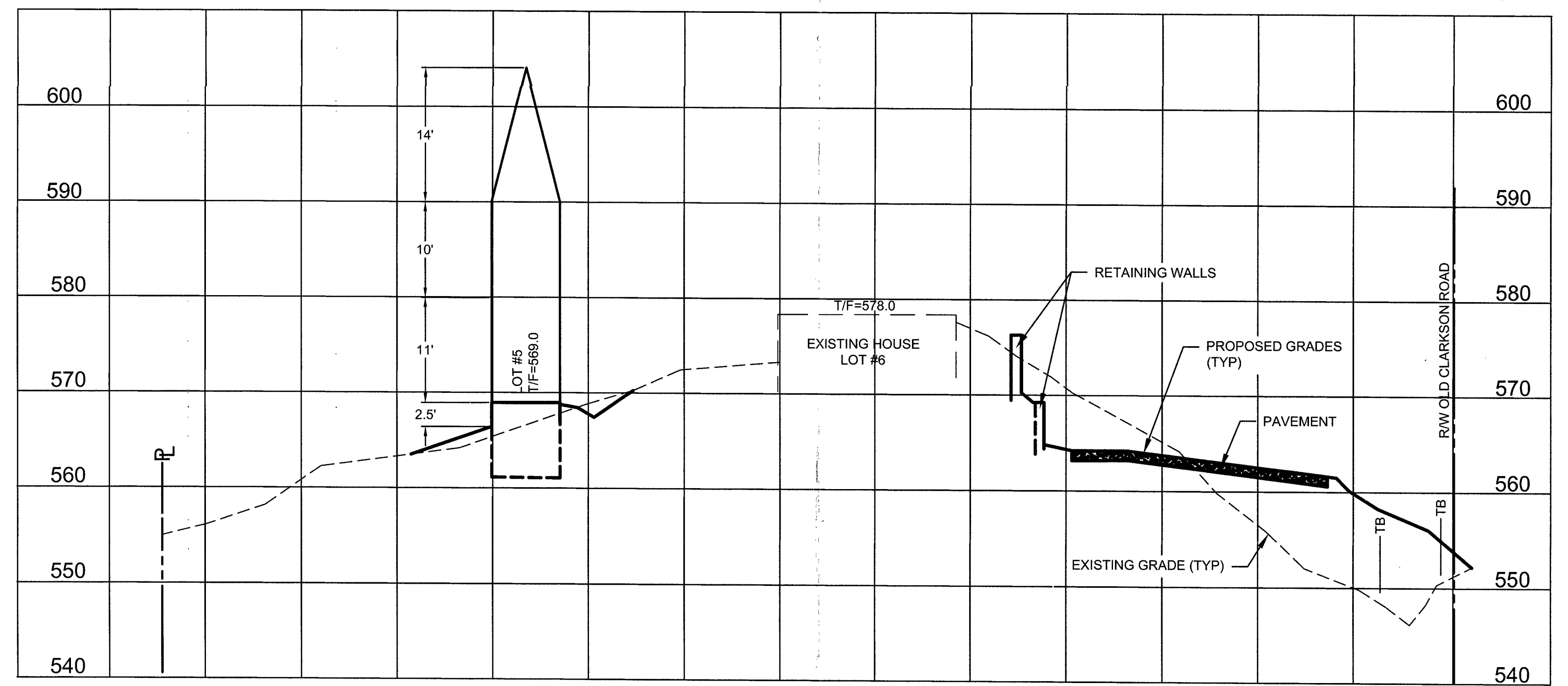
REV: 05/28/19: Rev Lot 5, Ret. Walls, Top of Bank 07/23/19: City Review
06/02/19: Add sheet 3 of 3 07/01/19: City Review

SHEET: **2 of 3**



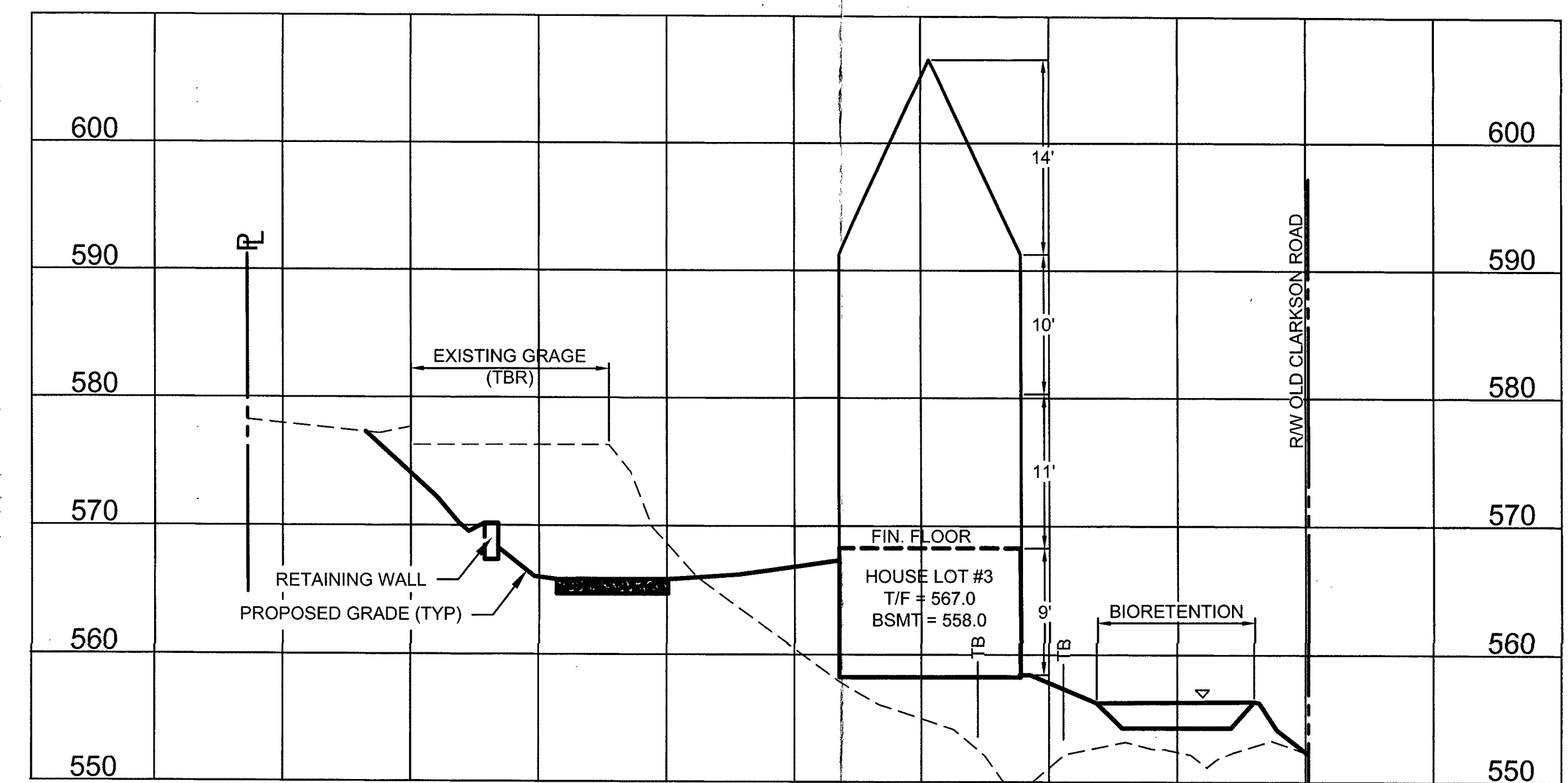
CAUTION!!!
CONTRACTOR SHALL EXERCISE EXTREME CAUTION DURING EXCAVATION OPERATIONS TO AVOID AND PROTECT EXISTING UNDERGROUND UTILITIES.

THESE PLANS ARE NOT FOR ANY CONSTRUCTION AND ARE TO BE CONSIDERED CONCEPTUAL ONLY.



SECTION A-A

HOR.: 1" = 30'
VER.: 1" = 10'



SECTION B-B

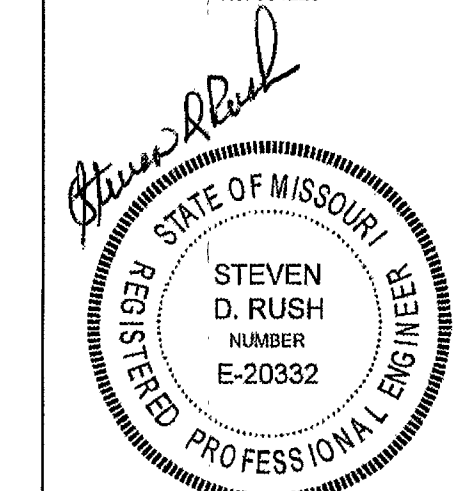
HOR.: 1" = 30'
VER.: 1" = 10'

MSD P-00

MSD BASE MAP NO. 19S

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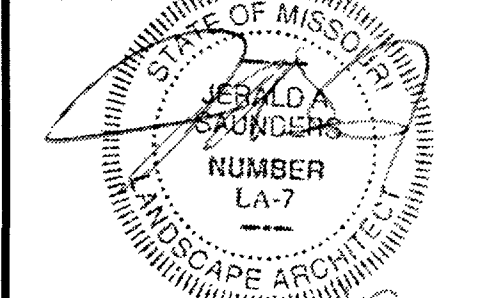
15750 OLD CLARKSON ROAD

DATE: JUNE 02, 2019	JOB NO.: 218-110	DRAWN BY: JDF
CHECKED BY: SDR		SCALE: 1" = 30'

CROSS SECTION SHEET

REV: 07/01/19: City Review
07/17/19: City Review
07/29/19: City Review

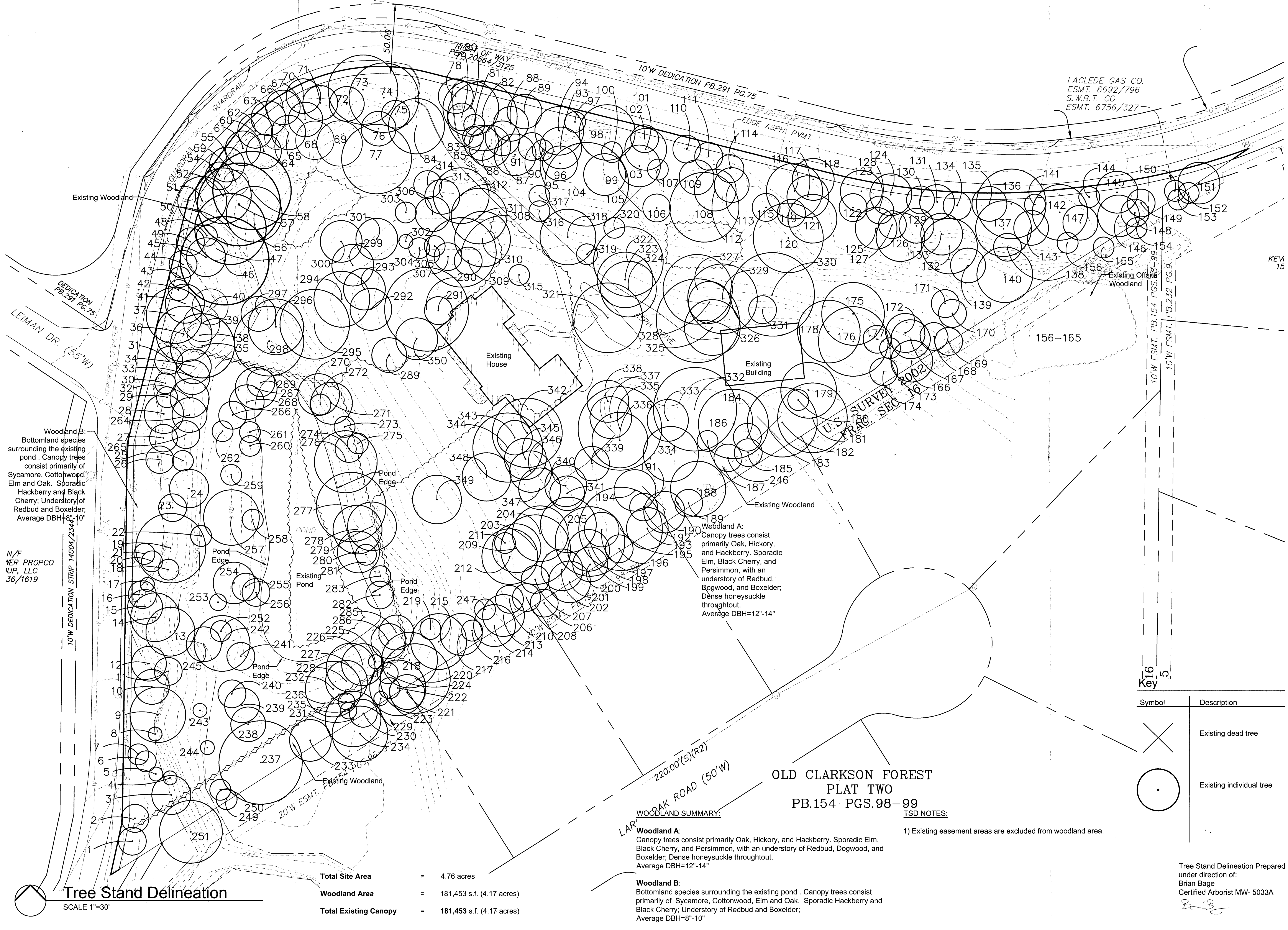
SHEET:
3 of 3



Jerald Saunders / Landscape Architect
MO License # LA-07
Consultants:

15750 Old Clarkson

Chesterfield, Missouri



Woodland B:
Bottomland species surrounding the existing pond. Canopy trees consist primarily of Sycamore, Cottonwood, Elm and Oak. Sporadic Hackberry and Black Cherry; Understory of Redbud and Boxelder; Average DBH=8"-10"

N/F
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Tree Stand Delineation
SCALE 1"=30'

Total Site Area = 4.76 acres
Woodland Area = 181,453 s.f. (4.17 acres)
Total Existing Canopy = 181,453 s.f. (4.17 acres)

WOODLAND SUMMARY:
Woodland A:
Canopy trees consist primarily Oak, Hickory, and Hackberry. Sporadic Elm, Black Cherry, and Persimmon, with an understory of Redbud, Dogwood, and Boxelder; Dense honeysuckle throughout. Average DBH=12"-14"
Woodland B:
Bottomland species surrounding the existing pond. Canopy trees consist primarily of Sycamore, Cottonwood, Elm and Oak. Sporadic Hackberry and Black Cherry; Understory of Redbud and Boxelder; Average DBH=8"-10"

**OLD CLARKSON FOREST
PLAT TWO
PB.154 PGS.98-99**

TSD NOTES:
1) Existing easement areas are excluded from woodland area.

Symbol	Description
	Existing dead tree
	Existing individual tree

Tree Stand Delineation Prepared under direction of:
Brian Bage
Certified Arborist MW- 5033A

Revisions:

Date	Description	No.
11/16/18	Client Comments	
11/29/18	Client Comments	
4/8/19	Plan Changes	
4/16/19	Plan Changes	
4/23/19	Plan Changes	
5/31/19	Plan Changes	
6/28/19	City Comments	
7/18/19	City Comments	

Drawn: KP
Checked: RS

loomisAssociates
Landscape Architects/Planners
202 S. Kirkwood Blvd., Suite 105
Chesterfield, Missouri 63005-1194
636.514.9666 Fax: 636.519.0997
E-mail: info@loomis-associates.com
Loomis Associates Inc.
Missouri State Certificate of Authority #: LAC #000019

Sheet Title:	Tree Stand Delineation
Sheet No:	TSD-1
Date:	9/24/18
Job #:	972.002

Tree Inventory

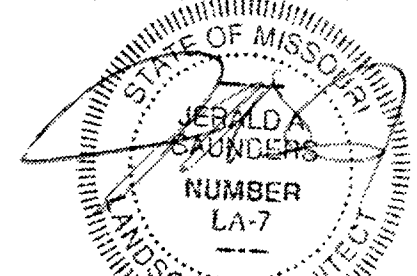
ID	Tree Name	DBH	Canopy Diam.	Condition Rating	Comment
1	Redbud	6	20	3	
2	Hickory	10	20	3	
3	Boxelder	10	30	2	x3
4	Hickory	5	10	3	
5	Hackberry	7	10	2	
6	Hackberry	8	15	2	
7	Hackberry	8	15	2	
8	Hackberry	7	10	2	
9	Hickory	18	40	3	
10	Hickory	12	25	2	
11	Oak	24	35	1	power lines
12	Hackberry	12	25	2	
13	Oak	28	35	1	power lines
14	Black Cherry	14	35	2	
15	Hickory	12	25	2	
16	Hickory	8	20	2	
17	Hickory	6	10	1	
18	Elm	8	15	2	
19	White Oak	28	50	2	
20	Hickory	6	15	2	
21	Redbud	5	50	2	
22	Red Oak	24	15	3	
23	Boxelder	10	20	2	
24	Hackberry	14	30	2	
25	Hackberry	8	15	2	
26	Hackberry	10	20	2	
27	Elm	12	20	1	power lines
28	Hickory	18	30	2	power lines
29	Elm	7	15	2	power lines
30	Hickory	8	15	2	power lines
31	Dogwood	5	20	2	
32	Hickory	10	30	2	
33	Hickory	8	25	2	
34	Hickory	8	25	2	
35	White Oak	28	50	2	
36	White Oak	24	40	2	power lines
37	White Oak	24	40	2	power lines
38	Hackberry	8	20	2	
39	Elm	10	30	2	
40	Hackberry	10	30	2	
41	White Oak	18	30	1	
42	Boxelder	8	15	1	power lines
43	White Oak	12	15	1	power lines
44	Red Oak	12	20	2	power lines
45	White Oak	16	30	2	
46	White Oak	24	50	2	
47	Hickory	8	10	3	
48	Hickory	8	15	2	
49	Hickory	6	20	2	
50	Red Oak	22	50	2	
51	Hickory	16	35	2	power lines
52	Oak	18	40	1	power lines
53					
54	Elm	8	20	2	
55	Hackberry	6	20	2	
56	Red Oak	1	40	2	
57	White Oak	22	60	3	
58	White Oak	22	60	3	
59	Hickory	8	20	3	
60	Red Oak	10	25	2	
61	Boxelder	8	20	2	
62	Boxelder	8	20	2	
63	Ash	10	15	1	power lines
64	Ash	10	15	1	power lines
65	Hickory	8	25	3	
66	Boxelder	8	15	1	power lines
67	Hickory	8	25	3	
68	Hickory	12	30	3	
69	Hickory	12	30	3	
70	Hackberry	5	15	2	
71	Ash	10	15	1	
72	Hickory	8	25	2	
73	White Oak	24	50	2	
74	White Oak	20	50	2	
75	Elm	10	20	1	
76	White Oak	12	25	2	
77	White Oak	18	50	3	
78	Bald Cypress	18	25	3	
79	Hickory	10	20	2	
80	Ash	16	40	2	
81	Red Oak	5	15	3	
82	Hickory	30	50	1	
83	Hackberry	8	15	2	
84	White Oak	16	40	2	
85	Hickory	8	25	2	
86	Ash	16	30	2	
87	White Oak	16	25	2	
88	Hickory	16	25	2	
89	Hickory	16	25	2	
90	Hickory	8	20	2	
91	Hackberry	12	30	3	
92					
93	Elm	14	30	2	
94	Hickory	18	35	3	
95	Elm	8	15	2	
96	Hickory	10	25	3	
97	Hackberry	7	15	2	
98	Hickory	18	40	3	
99	Ash	16	30	1	

Tree Inventory

ID	Tree Name	DBH	Canopy Diam.	Condition Rating	Comment
100	Boxelder	6	15	2	
101	Hickory	10	30	3	
102	Hickory	8	20	2	
103	Hickory	10	30	2	
104	White Oak	28	60	2	
105	White Oak	28	-	0	dead
106	Hackberry	5	20	3	
107	Hickory	5	15	2	
108	White Oak	24	50	2	
109	Hackberry	12	25	2	
110	Boxelder	8	20	2	
111	Boxelder	8	20	2	
112	Elm	10	30	2	
113	Hickory	12	25	2	
114	Oak	8	20	2	
115	Hickory	8	20	3	
116	Ash	24	40	2	
117	Hackberry	12	30	2	
118	Boxelder	12	30	3	
119	Sugar Maple	6	20	2	
120	White Oak	18	50	2	
121	White Oak	24	35	2	severe lean
122	Sugar Maple	8	20	2	
123	Hackberry	12	30	2	
124	Hickory	12	30	2	
125	Boxelder	6	15	2	
126	Hackberry	16	35	2	
127	Hackberry	10	20	2	
128	Hackberry	12	20	2	
129	Hickory	10	25	3	
130	White Oak	8	20	2	
131	Elm	8	25	2	
132	Hackberry	18	40	2	x2
133	Elm	8	30	3	
134	Red Oak	6	20	2	
135	Hickory	10	25	2	
136	White Oak	26	50	2	
137	White Oak	22	40	2	
138	White Oak	22	20	1	
139	Hackberry	10	25	2	
140	White Oak	18	40	2	
141	Elm	6	15	2	
142	Red Oak	28	40	2	heavy pruning
143	Sycamore	6	25	3	
144	Elm	10	15	2	
145	Oak	30	30	2	heavy pruning
146	Oak	14	30	2	
147	Black Cherry	10	25	2	
148	Persimmon	6	20	3	
149	Oak	6	20	2	
150	Redbud	8	15	2	
151	Boxelder	16	30	2	
152	Pine	5	15	2	offsite
153	Pine	5	15	2	offsite
154	Pine	5	15	2	offsite
155	Pine	8	15	2	offsite
156	Boxelder	5	15	2	offsite
157	Black Cherry	10	20	2	offsite
158	Black Cherry	10	20	2	offsite
159	Elm	6	15	2	offsite
160	White Oak	24	50	2	offsite
161	White Oak	18	40	2	offsite
162	Red Oak	10	25	2	offsite
163	White Oak	20	50	3	offsite
164	White Oak	12	30	2	offsite
165	White Oak	16	40	2	offsite
166	White Oak	20	40	2	
167	Hackberry	8	25	2	
168	Elm	6	20	2	
169	Hickory	12	20	2	
170	Hackberry	12	20	2	
171	Hickory	5	20	3	
172	Hackberry	12	25	2	lean
173	Hickory	6	15	2	
174	Hackberry	8	20	2	
175	White Oak	22	40	2	
176	Red Oak	28	45	1	
177	Hickory	10	20	2	
178	Hickory	14	50	3	
179	White Oak	20	45	3	
180	Hackberry	8	15	2	
181	White Oak	24	50	3	
182	White Oak	24	50	3	
183	White Oak	24	50	0	dead
184	Elm	10	15	2	
185	Hackberry	5	12	2	
186	White Oak	22	50	3	
187	Hickory	6	15	2	
188	White Oak	24	45	3	
189	Hickory	18	40	3	
190	Hickory	16	35	3	
191	White Oak	24	40	0	dead
192	Hickory	6	20	2	
193	Hackberry	12	30	3	
194	White Oak	12	30	2	
195	White Oak	24	60	2	
196	Hackberry	8	20	2	
197	Hickory	12	25	3	
198	White Oak	18	50	3	
199	Hickory	12	30	2	

Tree Inventory

ID	Tree Name	DBH	Canopy Diam.	Condition Rating	Comment
200	Hickory	12	25	3	
201	Hickory	14	30	3	
202	Hickory	12	30	3	
203	White Oak	22	50	3	
204	White Oak	14	40	2	
205	White Oak	18	40	2	
206	Hickory	12	20	2	
207	Hickory	12	20	2	
208	Hickory	6	20	3	
209	White Oak	24	35	3	
210	Hackberry	10	20	3	
211	White Oak	8	15	3	
212	White Oak	30	40	1	
213	White Oak	20	30	2	
214	White Oak	24	30	2	
215	White Oak	24	40	2	
216	Hickory	8	15	2	
217	White Oak	16	30	3	
218	Sycamore	24	40	3	
219	Black Cherry	8	15	2	
220	Cottonwood	28	50	3	
221	Hickory	12	25	2	offsite
222	Cottonwood	24	40	2	
223	Elm	12	15	1	
224	Black Cherry	10	15	2	
225	Elm	10	10	1	
226	Cottonwood	22	30	2	
227	Sycamore	22	35	3	
228	Elm	18	30	2	
229	Elm	5	10	2	
230	White Oak	18	-	0	
231	White Oak	20	40	2	
232	Cottonwood	24	40	3	
233	Hackberry	14	30	3	
234	White Oak	24	40	2	offsite
235	Elm	5	12	3	
236	Elm	5	12	3	
237	Red Oak	30	60	3	
238	Hackberry	14	25	2	
239	Hickory	10	25	2	
240	Hickory	8	20	3	
241	Hackberry	14	20	1	
242	Hackberry	24	40	3	
243	Red Oak	4	10	2	
244	Hickory	6	10	2	
245	Hackberry	14	25	2	
246	Black Walnut	8	20	2	
247	Hackberry	10	15	2	
248					
249					
250	Hickory	6	15	3	offsite
251	Hackberry	28	45	2	
252	Hackberry	8	15	2	
253	Hackberry	6	12	2	
254	Hickory	10	30	3	
255	Hickory	8	20	3	
256	Hickory	7	20	3	
257	Cottonwood	26	40	2	
258	Hickory	7	15	2	
259	Elm	6	15	2	
260	Hickory	8	15	3	
261	Sycamore	8	15	3	
262	Hickory	8	15	3	
263					
264	Hickory	12	25	3	
265	Hickory	12	20	2	
266	Hickory	8	20	3	
267	Elm	12	30	2	
268	Hickory	10	25	2	
269	Cottonwood	10	20	2	
270	Sycamore	12	30	3	
271	Hackberry	12	30	3	
272	Elm	8	15	2	
273	Hickory	8	15	2	
274	Hickory	14	20	2	
275	Hickory	14	15	2	
276	White Oak				

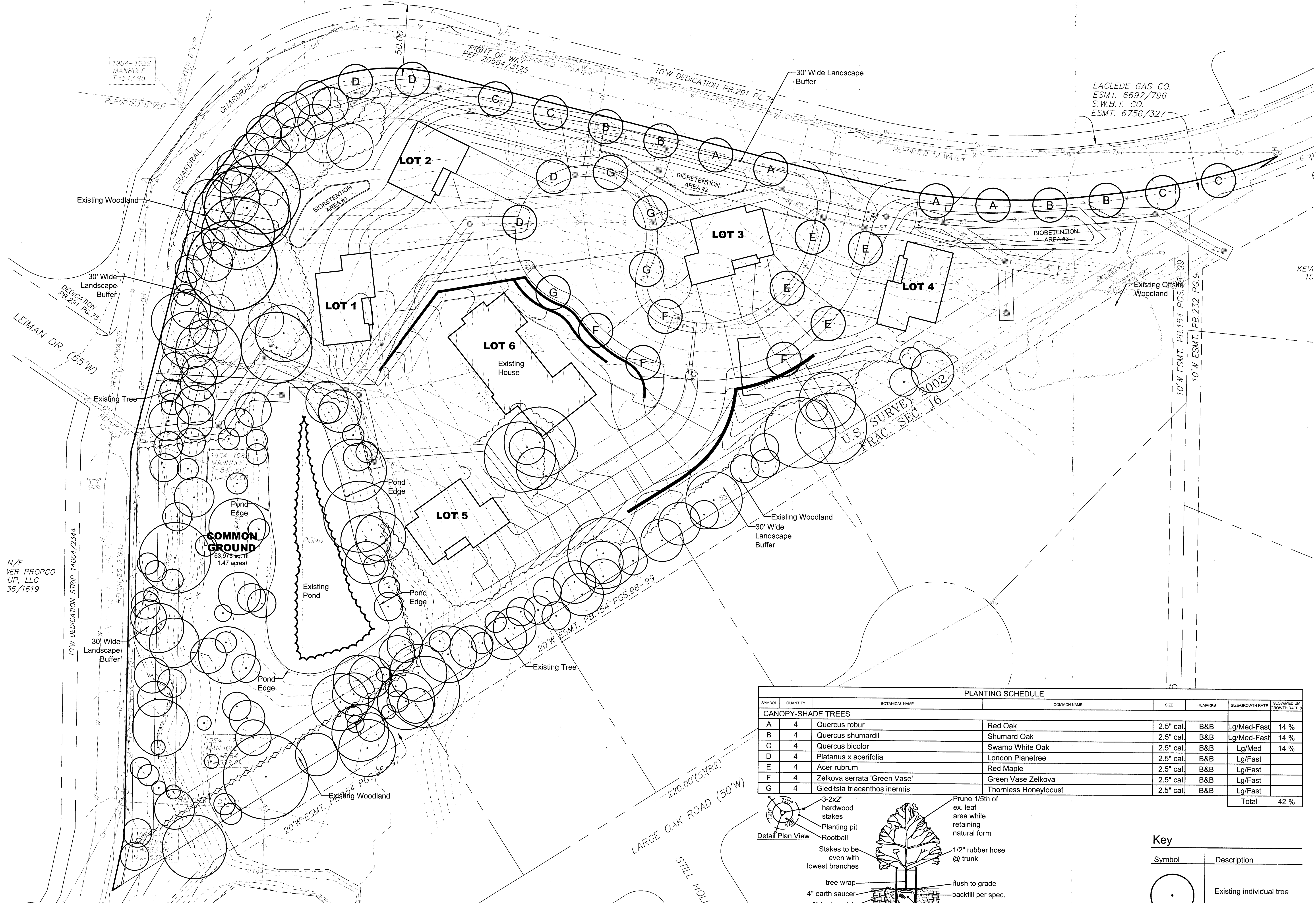


Jerald Saunders / Landscape Architect
MO License # LA-007

Consultants:

15750 Old Clarkson

Chesterfield, Missouri



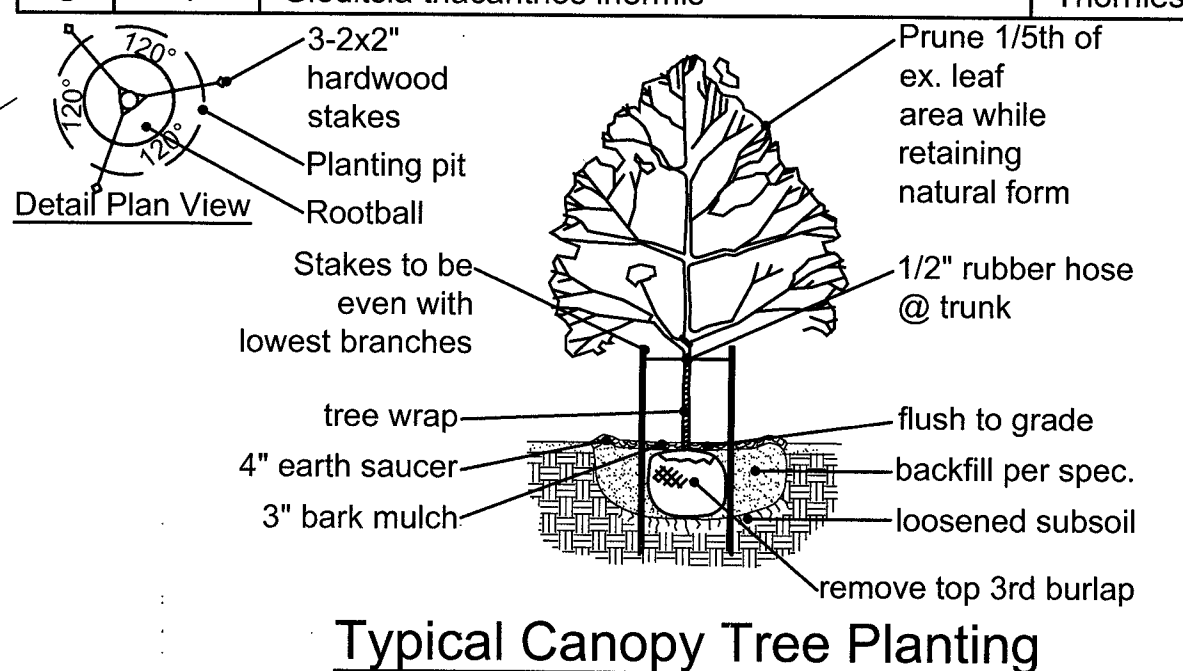
N/F
VER PROPCO
UP, LLC
36/1619

Revisions:

Date	Description	No.
6/28/19	City Comments	
7/18/19	City Comments	

Drawn: KP
Checked: RS

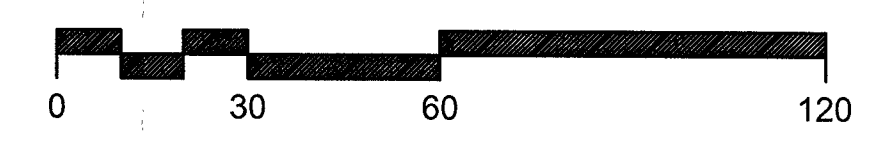
PLANTING SCHEDULE										
SYMBOL	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS	SIZE/GROWTH RATE	SLOW/MEDIUM GROWTH RATE %			
CANOPY-SHADE TREES										
A	4	Quercus robur	Red Oak	2.5" cal.	B&B	Lg/Med-Fast	14 %			
B	4	Quercus shumardii	Shumard Oak	2.5" cal.	B&B	Lg/Med-Fast	14 %			
C	4	Quercus bicolor	Swamp White Oak	2.5" cal.	B&B	Lg/Med	14 %			
D	4	Platanus x acerifolia	London Planetree	2.5" cal.	B&B	Lg/Fast				
E	4	Acer rubrum	Red Maple	2.5" cal.	B&B	Lg/Fast				
F	4	Zelkova serrata 'Green Vase'	Green Vase Zelkova	2.5" cal.	B&B	Lg/Fast				
G	4	Gleditsia triacanthos inermis	Thornless Honeylocust	2.5" cal.	B&B	Lg/Fast				
							Total	42 %		



Key

Symbol	Description
	Existing individual tree

Landscape Plan
SCALE 1"=30'



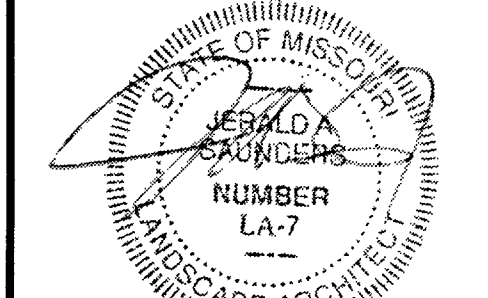
loomisAssociates

landscapeArchitects/planners

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Chesterfield, Missouri 63005-1194
636.359.8668 Fax: 636.359.0299
Email: info@loomisassociates.com

Loomis Associates Inc.
Missouri State Certificate of Authority #: LAC #0000191

Sheet Title: Landscape Plan
Sheet No: L-1
Date: 5/31/19
Job #: 972.002



Jerald Saunders / Landscape Architect
MO License # LA-007

Consultants:

15750 Old Clarkson
 Chesterfield, Missouri

Revisions:

Date	Description	No.
11/16/18	Client Comments	
11/29/18	Client Comments	
4/8/19	Plan Changes	
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5/31/19	Plan Changes	
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7/18/19	City Comments	

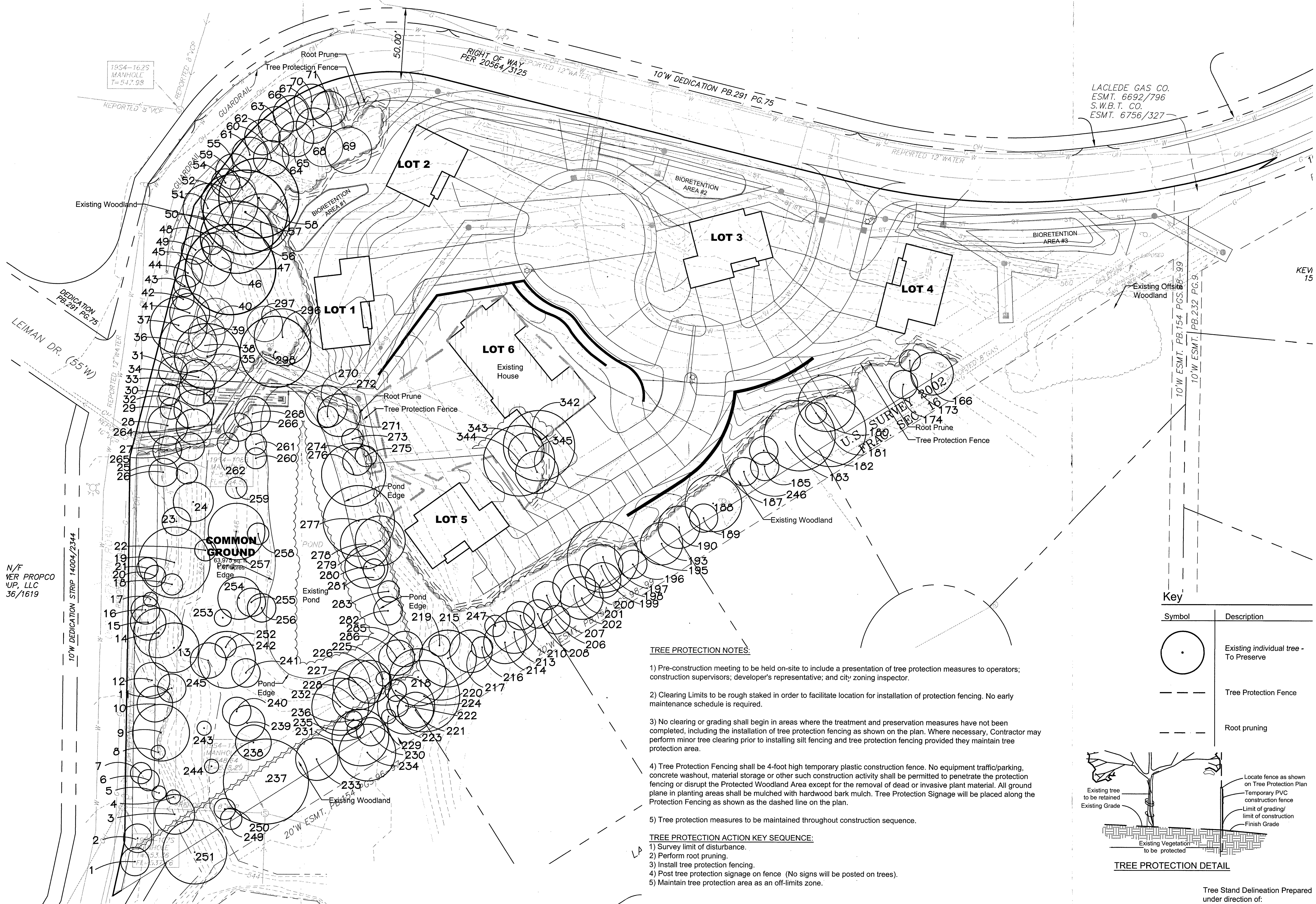
Drawn: KP
Checked: RS

loomisAssociates

landscape architects/planners
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 Chesterfield, Missouri 63025-1104
 636.510.5666 Fax 636.510.0097
 Email: info@loomisassociates.com

Loomis Associates, Inc.
 Missouri State Certificate of Authority #: LAC #000019

Sheet Title:	Tree Preservation Plan
Sheet No.:	TPP-1
Date:	11/16/18
Job #:	972.002



TREE PROTECTION NOTES:

- 1) Pre-construction meeting to be held on-site to include a presentation of tree protection measures to operators; construction supervisors; developer's representative; and city zoning inspector.
- 2) Clearing Limits to be rough staked in order to facilitate location for installation of protection fencing. No early maintenance schedule is required.
- 3) No clearing or grading shall begin in areas where the treatment and preservation measures have not been completed, including the installation of tree protection fencing as shown on the plan. Where necessary, Contractor may perform minor tree clearing prior to installing silt fencing and tree protection fencing provided they maintain tree protection area.
- 4) Tree Protection Fencing shall be 4-foot high temporary plastic construction fence. No equipment traffic/parking, concrete washout, material storage or other such construction activity shall be permitted to penetrate the protection fencing or disrupt the Protected Woodland Area except for the removal of dead or invasive plant material. All ground plane in planting areas shall be mulched with hardwood bark mulch. Tree Protection Signage will be placed along the Protection Fencing as shown as the dashed line on the plan.
- 5) Tree protection measures to be maintained throughout construction sequence.

TREE PROTECTION ACTION KEY SEQUENCE:

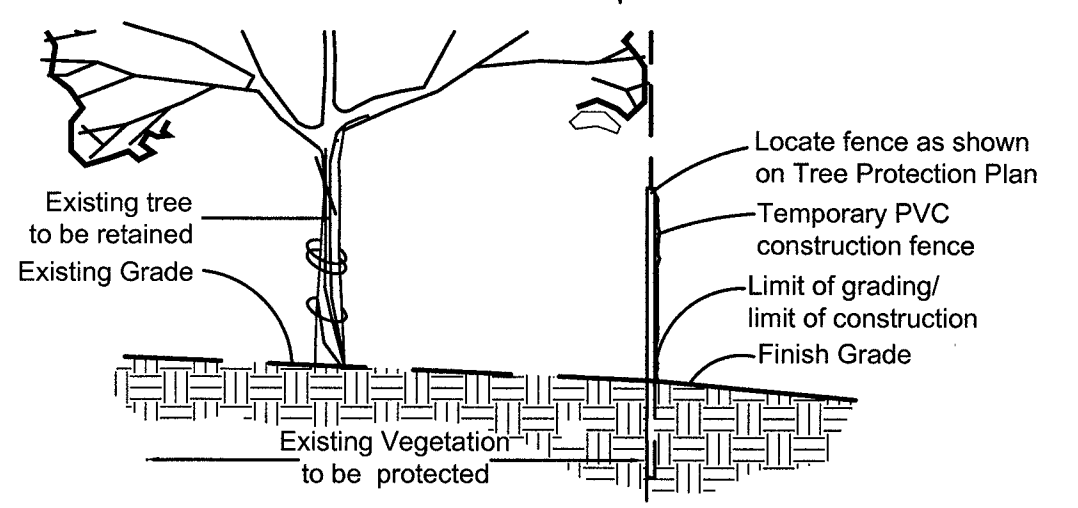
- 1) Survey limit of disturbance.
- 2) Perform root pruning.
- 3) Install tree protection fencing.
- 4) Post tree protection signage on fence (No signs will be posted on trees).
- 5) Maintain tree protection area as an off-limits zone.

TPP NOTES:

- 1) Existing and proposed easement areas are excluded from woodland area.
- 2) Tree protection fence length = 1,179 l.f.

Key

Symbol	Description
	Existing individual tree - To Preserve
	Tree Protection Fence
	Root pruning



TREE PROTECTION DETAIL

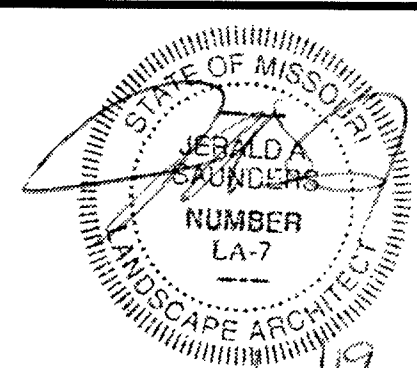
Tree Stand Delineation Prepared under direction of:
 Brian Bage
 Certified Arborist MW- 5033A

Tree Preservation Plan

SCALE 1"=30'

Total Existing Canopy To Remain = 74,557 s.f. (1.71 acres) 41.09%

N/F
VER PROPCO
UP, LLC
36/1619



Jerald Saunders / Landscape Architect
MO License # LA-007

Consultants:

Tree Inventory

ID	Tree Name	DBH	Canopy Diam.	Condition Rating	Comment
1	Redbud	6	20	3	
2	Hickory	10	20	3	
3	Boxelder	10	30	2	x3
4	Hickory	5	10	3	
5	Hackberry	7	10	2	
6	Hackberry	8	15	2	
7	Hackberry	8	15	2	
8	Hackberry	7	10	2	
9	Hickory	18	40	3	
10	Hickory	12	25	2	
11	Oak	24	35	1	power lines
12	Hackberry	12	25	2	
13	Oak	28	35	1	power lines
14	Black Cherry	14	35	2	
15	Hickory	12	25	2	
16	Hickory	8	20	2	
17	Hickory	6	10	1	
18	Elm	8	15	2	
19	White Oak	28	50	2	
20	Hickory	6	15	2	
21	Redbud	5	50	2	
22	Red Oak	24	15	3	
23	Boxelder	10	20	2	
24	Hackberry	14	30	2	
25	Hackberry	8	15	2	
26	Hackberry	10	20	2	
27	Elm	12	20	1	power lines
28	Hickory	18	30	2	power lines
29	Elm	7	15	2	power lines
30	Hickory	8	15	2	power lines
31	Dogwood	5	20	2	
32	Hickory	10	30	2	
33	Hickory	8	25	2	
34	Hickory	8	25	2	
35	White Oak	28	50	2	
36	White Oak	24	40	2	power lines
37	White Oak	24	40	2	power lines
38	Hackberry	8	20	2	
39	Elm	10	30	2	
40	Hackberry	10	30	2	
41	White Oak	18	30	1	
42	Boxelder	8	15	1	power lines
43	White Oak	12	15	1	power lines
44	Red Oak	12	20	2	power lines
45	White Oak	16	30	2	
46	White Oak	24	50	2	
47	Hickory	8	10	3	
48	Hickory	8	15	2	
49	Hickory	6	20	2	
50	Red Oak	22	50	2	
51	Hickory	16	35	2	power lines
52	Oak	18	40	1	
54	Elm	8	20	2	
55	Hackberry	6	20	2	
56	Red Oak	1	40	2	
57	White Oak	22	60	3	
58	White Oak	22	60	3	
59	Hickory	8	20	3	
60	Red Oak	10	25	2	
61	Boxelder	8	20	2	
62	Boxelder	8	20	2	
63	Ash	10	15	1	power lines
64	Ash	10	15	1	power lines
65	Hickory	8	25	3	
66	Boxelder	8	15	1	power lines
67	Hickory	8	25	3	
68	Hickory	12	30	3	
69	Hickory	12	30	3	
70	Hackberry	5	15	2	
71	Ash	10	15	1	

Tree Inventory

ID	Tree Name	DBH	Canopy Diam.	Condition Rating	Comment
166	White Oak	20	40	2	
173	Hickory	6	15	2	
174	Hackberry	8	20	2	
179	White Oak	20	45	3	
180	Hackberry	8	15	2	
181	White Oak	24	50	3	
182	White Oak	24	50	3	
184	Elm	10	15	2	
185	Hackberry	5	12	2	
188	White Oak	24	45	3	
189	Hickory	18	40	3	
190	Hickory	16	35	3	
192	Hickory	6	20	2	
193	Hackberry	12	30	3	
196	Hackberry	8	20	2	
198	White Oak	18	50	3	
199	Hickory	12	30	2	
200	Hickory	12	25	3	
201	Hickory	14	30	3	
202	Hickory	12	30	3	
206	Hickory	12	20	2	
207	Hickory	12	20	2	
208	Hickory	6	20	3	
210	Hackberry	10	20	3	
213	White Oak	20	30	2	
214	White Oak	24	30	2	
215	White Oak	24	40	2	
216	Hickory	8	15	2	
217	White Oak	16	30	3	
218	Sycamore	24	40	3	
219	Black Cherry	8	15	2	
220	Cottonwood	28	50	3	
221	Hickory	12	25	2	offsite
222	Cottonwood	24	40	2	
223	Elm	12	15	1	
224	Black Cherry	10	15	2	
225	Elm	10	10	1	
226	Cottonwood	22	30	2	
227	Sycamore	22	35	3	
228	Elm	18	30	2	
229	Elm	5	10	2	
230	White Oak	18	-	0	
231	White Oak	20	40	2	
232	Cottonwood	24	40	3	
233	Hackberry	14	30	3	
234	White Oak	24	40	2	offsite
235	Elm	5	12	3	
236	Elm	5	12	3	
237	Red Oak	30	60	3	
238	Hackberry	14	25	2	
239	Hickory	10	25	2	
240	Hickory	8	20	3	
241	Hackberry	14	20	1	
242	Hackberry	24	40	3	
243	Red Oak	4	10	2	
244	Hickory	6	10	2	
245	Hackberry	14	25	2	
247	Hackberry	10	15	2	
248					
249					
250	Hickory	6	15	3	offsite

Tree Inventory

ID	Tree Name	DBH	Canopy Diam.	Condition Rating	Comment
251	Hackberry	28	45	2	
252	Hackberry	8	15	2	
253	Hackberry	6	12	2	
254	Hickory	10	30	3	
255	Hickory	8	20	3	
256	Hickory	7	20	3	
257	Cottonwood	26	40	2	
258	Hickory	7	15	2	
259	Elm	6	15	2	
260	Hickory	8	15	3	
261	Sycamore	8	15	3	
262	Hickory	8	15	3	
264	Hickory	12	25	3	
265	Hickory	12	20	2	
266	Hickory	8	20	3	
268	Hickory	10	25	2	
270	Sycamore	12	30	3	
271	Hackberry	12	30	3	
272	Elm	8	15	2	
273	Hickory	8	15	2	
274	Hickory	14	20	2	
275	Hickory	14	15	2	
276	White Oak	28	45	3	
277	Red Oak	36	50	2	
278	White Oak	24	35	2	
279	White Oak	24	35	3	
280	Red Oak	12	30	3	
281	Hackberry	12	15	2	
282	Hickory	12	20	2	
283	Hickory	5	15	3	
285	Hackberry	14	25	2	
286	Hackberry	12	25	2	
296	Red Oak	18	40	3	
297	Hickory	18	25	3	
298	White Oak	10	50	3	severe lean
342	White Oak	24	50	2	
343	Hickory	10	25	2	
344	White Oak	18	50	3	
345	White Oak	12	30	3	

15750 Old Clarkson
 Chesterfield, Missouri

Revisions:

Date	Description	No.
11/16/18	Client Comments	
11/29/18	Client Comments	
4/8/19	Plan Changes	
4/16/19	Plan Changes	
4/23/19	Plan Changes	
5/31/19	Plan Changes	
6/26/19	City Comments	
7/18/19	City Comments	

Drawn: KP
Checked: RS

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Loomis Associates Inc.
 Missouri State Certificate of Authority #: LAC #000019

Sheet Title:	Tree Preservation Plan
Sheet No:	TPP-2
Date:	9/17/18
Job #:	972.002

Tree Condition Rating:
 1 = In Decline
 2 = Poor Quality
 3 = Average Quality
 4 = Good Quality
 5 = Excellent Quality

Tree Stand Delineation Prepared under direction of:
 Brian Bage
 Certified Arborist MW- 5033A

B. Bage